EATING DISORDERS AND BODY IMAGE: TRIANGULATING

ACADEMIC PREPARATION, COACHES AND ATHLETIC TRAINERS' BELIEFS,

AND FEMALE HIGH SCHOOL ATHLETES' EXPERIENCES

by

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(Under the Direction of Diane M. Samdahl)

ABSTRACT

This study was performed to determine what training athletic training and coaching professionals receive within the realm of body image and eating disorders that prepare them to work with female athletes. A second purpose of the study was to determine high school coaches' and athletic trainers' knowledge and beliefs within the realm of body image and eating disorders as compared to previous studies on collegiate professionals. And finally, as a third purpose, the perspectives of collegiate females who have previously participated in high school athletics was assessed to offer a reflection of body image related experiences in high school athletics. A curriculum scan and review of accreditation standards was performed to assess training of the professionals. A survey was sent to high schools in Georgia to evaluate the knowledge and beliefs of professionals. And focus groups were conducted with the former athletes. Eating disorder and nutrition information was found within the standards and curriculum. This suggests that graduates from these programs are receiving information on these issues. Coaching and athletic training professionals believed that these were serious issues but may lack the training and knowledge to offer support. Professionals also suggested tools that could assist these efforts in the future. Focus groups revealed numerous experiences surrounding these issues and participants offered recommendations for professionals to address athletes in these areas. By combining the results of the

three study components, training and educational resources can be better tailored to professionals and individuals who offer support to female athletes with these issues.

INDEX WORDS: Body image, eating disorders, coaching, athletic training, physical education, female athletes

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To my family and parents, I couldn't have done this without your encouragement and support—

Especially for Will, I thank you for being not only a husband but my friend and for your motivating

words, love, and patience. And to my Jax, what a precious gift you are, you push be to be better each day.

You were definitely my source of motivation during this process.

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Chapter 1: Introduction

In recent decades, there have been great strides in the promotion and equity of women's sport and physical activity. The enactment of the 1972 Educational Amendment (Title IX) helped increase women's athletic opportunities as well as provided for sport and competition that accommodate the interests and abilities of women. As a result, women and girls are venturing out to explore a greater range of sports and physical activities than in the past. In addition, overall interest in organized/sanctioned team sports is escalating, particularly among females with participation showing annual growth. In 2003, 45%-50% of all tennis players, bowlers, skiers, inline skaters, and hikers were female (*U.S Trends in Team Sports*, 2007). In order for these trends to continue, it is essential that professionals in health, sport, and education be attentive to issues and concerns that women and girls face within these activities.

Body image, "the picture of our own body which we form in our own mind" (Schilder, 1935), is one area in which these concerns exist. Cultural norms of femininity and the ideal body contrast with "masculine" conceptions that define an athlete. Many female athletes face a battle between being thin, lean, and toned to achieve this desired femininity, and achieving the strong, appropriate muscular body type to meet the demands of performance. This masculine/feminine conflict may be even more apparent in adolescent females who have a difficult time adjusting to the physicality that defines an "ideal" athlete (Mosewich, Vangool, Kowlaski, & McHugh, 2009).

Historically, research on body image has been linked to adolescence and the onset of puberty; however research in the past decade indicates that body image ideals appear as early as the pre-pubescence stages and continue to influence women throughout their lifetimes (Birbeck & Drummond, 2003). Adolescence is considered an especially vulnerable period for disturbances in numerous arenas; however, body image remains a salient factor with developmental challenges being extensive, especially for girls. During early stages of development, significant physical changes in the body, increased social

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interactions, and exposure to mechanisms of literacy and media all aid in establishing body image concepts and provide numerous opportunities for children and adolescents to either create or reinforce body image ideals. For boys, puberty includes characteristics of height, speed, broadness, and strength. Females generally get rounder and have increased body fat leading to diminished self-concepts. During high school these standards increase pressure on girls to attain physical beauty to match ideal, thin shaped western ectomorphic standards.

Research into body image among adolescents has documented a continual progression towards a more distorted and negative perception of the body, despite most adolescents being of normal body weight (O'Dea, 1995). Negative body image can be considered a "normative discontent," particularly among women in Western societies (Cash & Henry, 1995). This is the notion that discontent with an individual's current appearance is normal. Positive body image, clinically termed "body satisfaction," reflects a person's acceptance and like of the body part/body domain under consideration while negative body image, termed "body image dissatisfaction," represents a dislike and may pose several serious health concerns (Filiault & Drummond, 2008). These same authors indicate a relationship between body dissatisfaction and poor self-esteem, exercise addiction, extreme dieting, social isolation, and personality disorders.

The National Eating Disorders Association (NEDA) (2010) acknowledged that body image, defined as "the way one sees themselves in their mind or in the mirror" can be a contributing factor to eating disorders. The National Institute of Mental Health (NIMH) (2009) recognized eating disorders as an illness. Eating disorders are real, treatable medical illnesses with complex underlying psychological and biological causes. The NIMH described individuals with an eating disorder as having a "warped sense of body image," and again like body image dissatisfaction, eating disorders frequently appear during adolescence or young adulthood.

Adolescence is a high-risk period for the development of negative body image and eating disorders, and athletes in this age group potentially may be at even greater risk (Taub & Blinde, 1992).

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Athletes often have high self expectations, rigid approaches to reaching goals, and perfectionist tendencies. These demands increase in competitive sporting arenas such as gymnastics, dance, cheerleading, volleyball, and soccer. Research indicates women in aesthetic sports such as dance, cheerleading, and figure skating in which the body is seen as an art form are particularly vulnerable to body dissatisfaction, eating disorders, and disordered eating (Patel, Greydanus, Pratt, & Phillips, 2003). To prevent escalation of this problem, the knowledge and beliefs surrounding body image and eating disorders of professionals who work with these athletes (i.e. athletic trainers and coaches) should be better understood.

Background

Given the importance of social influences on the development of body dissatisfaction, the influence of coaches and athletic trainers are important. Training requirements of female athletes often mean they spend a lot of time with professionals in coaching and athletic training positions. Therefore coaches and athletic trainers have the potential to impact the athletes in the development of body image issues. Elliot, Goldberg, Moe, DeFrancesco, Durham, and Hix-Small (2006) concluded that sports teams are a natural and effective vehicle for promoting healthy lifestyles and helping defeat disordered eating, the use of athletic-performance-enhancing substances, and other health-harming behaviors.

Although studies focusing on high school coaches and body image are few, studies of collegiate athletes have shown increased incidence of these disorders in relation to various coaching perspectives. For example, eating disorders were more prevalent among female athletes who started on an unsupervised dieting program after being told to lose weight by their coach (Sundgot- Borgen, 1994). A study of tennis players indicated that coaches had a slightly negative attitude toward overweight individuals (Harris, 2000). Another survey of coaches (Heffner, Ogles, Gold, Marsden, & Johnson, 2003) found that a substantial proportion of coaches engage in some form of monitoring or weight management behaviors with their athletes. In addition, Smith and Ogle (2006) suggested that coach-athlete interactions set a context for athletes' body-related attitudes and behaviors.

In addition to the research on collegiate coaches, collegiate athletic trainers' knowledge and behaviors have been studied to some degree with respect to both the knowledge of dealing with eating disorders and body image issues as well as confidence in these areas. Vaughan, King, and Cottrell (2004) reported that 91% of athletic trainers had dealt with an eating disorder while only a very small percentage felt confident in managing or asking an athlete if they had an eating disorder. Furthermore they reported that 93% of athletic trainers said increased attention needs to be paid to preventing eating disorders among college female athletes. A more recent study reviewed perceptions and knowledge of collegiate athletic trainers' regarding disordered eating, finding that most report it to be a problem in the structured sport setting and that athletic trainers' need knowledge in the domains of disordered eating (Thompson, Yingling, Boardley, & Rocks, 2007).

Athletic trainers' and coaches play significant roles in both the physical and psychological health of their athletes. While research has explored collegiate coaches and athletic trainers' perceptions and knowledge regarding body image and eating disorders, minimal research has investigated the professional perspectives and knowledge of high school coaches and athletic trainers. While we know these professionals can influence female athletes' body image, we know little about this influence at the high school level, a time most salient in body image development. High school athletic trainers and coaches all have the opportunity to influence female participants; however, we do not fully know what role the knowledge and beliefs of these professionals can play in either ameliorating or exacerbating body image disorders. Given that these individuals influence the lives of female athletes during the influential time prior to entering college, their training and beliefs should be assessed.

Purpose of the Study

The purpose of this study is to determine what training these professionals receive within the realm of body image and eating disorders that prepare them to work with female athletes. A second purpose of the study is to determine if differences exist between high school coaches and athletic trainer's knowledge of eating disorders, experience with eating disorders, and beliefs surrounding the

responsibility in the identification of these disorders, as compared to previous studies on collegiate professionals. Previous studies have indicated that collegiate professionals have a negative impact or feel unprepared to handle issues in this arena; in this study I want to determine if this is also true of professionals in the high school arena. And finally, as a third purpose of the study, the perspectives of collegiate females who have previously participated in high school athletics will be assessed to offer a unique reflection on interaction with body-image-related experiences in relation to high school coaches and athletic trainers. This component of the study will help me identify the needs of high school-aged female athletes concerning body image and eating disorders.

Specifically, the research questions that will guide the study include:

(1) What policies and educational components are present in the training of professionals (high school athletic trainers and coaches) with regard to the identification and management of body image and eating disorders?

(2) What perspectives do professionals working with high school-aged female athletes possess regarding the identification and management of issues surrounding eating disorders?

(2a) What experiences have professionals had working with high school-aged female athletes with eating disorders?

(2b) What beliefs and knowledge do professionals possess in the identification and management of eating disorders in high school-aged female athletes?

(2c) What attitudes do professionals possess about their personal responsibility in the management of eating disorders in high school-aged female athletes?

(2d) What differences exist between athletic training and coaching professionals regarding the identification and management of eating disorders?

(3) What are the needs of high school-aged female athletes relating to body image issues and eating disorders during their experience in high school athletics?

(3a) What experiences have former high-school female athletes had with body image and

eating disorder issues?

(3b) How did professionals (coaches and athletic trainer's) at the high school influence

these experiences?

(3c) What recommendations would former high-school female athletes to professionals

working at this level?

Subjectivities

As an athletic trainer and health educator, my background has primarily been aligned with

positivism. As I become increasingly involved in research endeavors and as my interests grow in areas of

body image, my epistemological perspective has shifted to that of post-positivism. There is no exact

science within the realm of body image. What might negatively influence one individual might impact

another in a positive manner. This can make it difficult to construct body image education and

curriculum as a medium to reach "all." Therefore, as a result of this study, I hope to design and implement

effective curriculum material for athletic training and coaching professionals, particularly at the high-

school level.

By maintaining a post positivist epistemology I feel that I am better equipped to prevent

detaching the disorder from the individual. I realize that issues surrounding body image are not value

free. Perceived body image and body image construction are value-laden for the athletes, and the values

of professionals working with female athletes also play a significant role.

A principal subjectivity in which I need to take caution is the fact that I have previously

experienced a body image disorder. This awareness is central to the relationship I will have with the

participants of the study. I understand how "harmless" comments made by others are magnified by an

individual with a body image issue. I also understand how weight loss becomes addicting and how

perceptions of one's own image vary dramatically from what others see. I feel that having had a disorder

in the past enables and yet limits my analysis of the data I will collect. I may read more into what the

professionals are stating about the girls, leading to the explication of more than the participant articulates. I also may experience emotional stirrings in interviews in instances where I feel the professionals should have done more in their work with the athletes. To ease such subjectivities, I will use member checks to ensure that my representations capture the participants' perspectives. In my acknowledgement of these subjectivities, I am hoping to unmask any of these predispositions in order to constitute a richer and fuller analysis and interpretation of the data that the participants provide.

Limitations

The limitations of this study are as follows:

1. The researcher must assume that the participants answer the questionnaire honestly.
2. The researcher must assume that participants in a focus group are sharing authentic and honest information.

Definition of Key Terms

The following terms will be used throughout the research. These terms are unique to this research.

Adolescence. A period between 13 and 19 years old.

Athletic training. A profession practiced by athletic trainers who collaborate with physicians to optimize activity and participation of patients and clients. It encompasses the prevention, diagnosis, and intervention of emergency, acute, and chronic medical conditions involving impairment, functional limitations, and disabilities (National Athletic Trainer's Association, 2008).

Body cathexis. The degree of satisfaction or dissatisfaction people have with their bodies and their bodies' separate parts (e.g., face, breasts, hips, waist, thighs, feet; Secord & Jourard, 1953).

Body image. "The picture of our own body which we form in our own mind'' (Schilder,1935).

Body dissatisfaction. Also known as negative body image. Represents a person's dislike of the body part/body domain under consideration (Filiault & Drummond, 2008).

Body satisfaction. Also known as positive body image. Reflects a person's acceptance and like of the body part/body domain under consideration (Filiault & Drummond, 2008).

Disordered eating. A classification used in the health-care field) to describe a wide range of irregular eating behaviors that do not warrant a diagnosis of a specific eating disorder.

Eating disorders. Eating disorders -- such as anorexia, bulimia, and binge eating disorder – include extreme emotions, attitudes, and behaviors surrounding weight and food issues. Serious emotional and physical problems that can have life-threatening consequences for females and Males (National Eating Disorders Association, 2005).

Title IX. 1972 Educational Amendment. A federal law that prohibits sex discrimination in any educational program or activity at any educational institution that is a recipient of federal funds (Women's Sport Foundation, 2008).

Young adult. An individual between the ages of 20 and 40 (Erikson, 1950).

Concluding Thoughts

It is my hope that through conducting this research I will be able to design and implement effective curriculum materials for athletic training and coaching professionals. Determining the training these professionals currently receive within the realm of body image and eating disorders will act as a springboard for these training materials. By gaining an understanding of high-school athletic trainer's knowledge of eating disorders, experience with eating disorders, and beliefs surrounding the responsibility in the identification of these disorders, and by incorporating the recommendations of former high school athletes, I will be better able to tailor these materials to these professionals with a specific focus on how coaches and athletic trainers' can better prevent negative body image leading to eating disorders.

Chapter 2: Review of the Literature

The enactment of the 1972 Educational Amendment (Title IX) helped increase women's athletic opportunities immensely as well as provided for sport and competition that accommodates the interests and abilities of women. Title IX is a federal law that prohibits sex discrimination in any educational program or activity at any educational institution that is a recipient of federal funds (Women's Sport Foundation, 2008). For women in athletics, it required that women be provided an equitable opportunity to participate in sports as men. Since enactment of this amendment, female high school athletic participation has increased by 904% and female collegiate athletic participation has increased by 456% (Women's Sport Foundation, 2008).

Women in Sport and Physical Activity

Reid, Dyck, McKay & Frisby (2000) defined physical activity as any bodily movement produced by skeletal muscles that result in energy expenditure above the basal level. Exercise is often considered a subcategory of physical activity. Exercise is defined as "physical activity that is planned, structured, repetitive, and purposive in the sense that improvement or maintenance of one or more components of physical fitness is the objective" (British Columbia Center for Excellence in Women's Health, 2000, p.24). Sport was referenced as "institutionalized competitive activities that involve vigorous physical exertion or the use of relatively complex physical skills by individuals whose participation is motivated by a combination of intrinsic and extrinsic factors" (p. 24). While sport must contain certain elements to varying degrees such as physical skill, competition, institutionalized rules and a socialization process, sport does not have inherent age or performance level requirements.

Previously beliefs about women and girls' participation in sport and physical activity, particularly rough and tumble games, blamed physical activity for damaged reproductive systems and health. Prior to 1870 women were allowed little opportunity with regard to "sport." Traditional notions of participation

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were attributed to unfeminine and muscular characteristics. Women were thought to be at risk for uterine damage. Girls and women, most notably white upper class women, were discouraged from engaging in activities that doctors and educators felt would interfere with fertility and their ability to carry babies to term (Daniels, 2005). Activities for women were recreational rather than sport-specific, emphasizing physical activity rather than competition (Bell, 2007). In essence, they were of free range – rule-less, informal, and noncompetitive.

Today physical activity and exercise are encouraged. Research demonstrates that early exposure to sports and physical activity increases the likelihood of continued participation. More so, daily physical education in primary school appears to have a significant long-term positive effect on exercise habits in women (Women's Sports Foundation, 2008). Increased physical activity has been shown to improve cholesterol levels and subsequently decrease the risks of cardiovascular disease as well as have positive benefits related to psychosocial health and well-being (including stress, anxiety, depression, premenstrual syndrome, self-efficacy, mood state, cognitive functioning, well-being and quality of life), body image and self-esteem, eating disorders, smoking cessation and drug rehabilitation, cardiovascular disease and hypertension, osteoporosis, estrogen-related cancers, menopausal symptoms, and fibromyalgia and chronic fatigue syndrome (Reid, Dyck, McKay, & Frisby, 2000). Furthermore the Women's Sport and Fitness Foundation (WSFF) (2008) found that physical activity and exercise can increase confidence, create an appetite for a healthier lifestyle, and sustain positive behavior change.

Currently swimming, cycling, and dance exercises are the three sports most participated in by women (Women's Sports and Fitness Foundation, 2009), however women still fall well below the norm compared to men. In all grade levels, girls get significantly less activity than boys. In addition, fewer high school girls meet the standards for vigorous physical activity and strengthening exercises than boys (World Sports Foundation, 2008). Women are not as likely as men to join sports clubs or take part in competition. The greatest difference between men and women is at age 18 where more than twice as

many men than women do sport regularly. There is also a decline in physical activity with increasing age with this trend being more dramatic for girls than for boys (World Sports Foundation, 2008).

Body Image

Research on body image and women is abounding. Most recently accepted as a multidimensional construct, body image is not easily defined. Cash and Pruzinski (1990) described 'body image' (BI) as one's perceptions and attitudes in relation to one's own physical characteristics. In addition, Schilder (1935) defined body image as ''the picture of our own body which we form in our own mind.'' To complement these definitions, it is also useful to consider further elements of body image. Body image is composed of two central facets, evaluation and investment (Cash & Pruzinski, 1990). Body image also encompasses perceptual, cognitive, affective, and behavioral components (Cash & Brown, 1987; Cash, Ancis, & Strachan, 1997).

Also positioned within this framework are body dissatisfaction and body cathexis. Although similar to body image, Keeton, Cash, and Brown (1990) defined body dissatisfaction as the discrepancy between an individual's approximation of their actual body size and an estimate of their ideal body, whereas body cathexis extends the definition to include the degree of satisfaction or dissatisfaction people have with their bodies and their bodies' separate parts (e.g., face, breasts, hips, waist, thighs, feet; Secord & Jourard, 1953). While discussions of these issues are often limited to younger women, no age group remains untouched.

Media, advertisements, and popular culture continue to place thinness as the standard for beauty among females of all ages. This idealized standard may be internalized by many women who, as a result, experience their own body size and weight as excessive and unacceptable (Fallon & Rozin, 1985). Wearing (1998) noted, "Women are constantly creating and recreating themselves in an attempt to bring their bodies and the appearance of their bodies in line with the dominant textual discourse" (p. 106). Body image is not static. It is sensitive to changes in mood, environment, and physical experience. Perceptions about ideal body size are shaped from a variety of experiences and begin to develop in childhood and

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adolescence and often persist into adulthood (Stuhldreher & Ryan, 1999). In an attempt to discuss the consideration of body image in the planning of recreation and leisure experiences such as sport, it may be beneficial to briefly consider theoretical foundations with regard to body image.

Body Image Theories

The *sociocultural theoretical model*, proposed by Thompson, Heinberg, Altabe, and Tantleff-Dunn (1999), provided support for understanding body image disturbance. This model argued that the majority of individuals do not match the unrealistic standards for attractiveness set by Western society. Furthermore perceived pressure concerning appearance, from sources such as the media, family, and peers, leads to disordered eating through internalization of cultural ideals and body dissatisfaction. Tiggeman (2001) asserted that this model offers a convincing theoretical explanation for our society's high level of body image disturbance, body dissatisfaction, and the increasing rate of eating disorders among women. Tiggeman further posited, "Current societal standards for beauty inordinately emphasize the desirability of thinness, and this ideal of thinness is accepted by most women" (p. 239). This theory further contended that women's dissatisfaction with their physical appearance stems from: (1) the thin body ideal that is promulgated in Western societies; (2) the tendency for women to adopt a "body as object" rather than "body as process" orientation; and (3) the thin is good assumption which emphasizes the rewards that are accrued by being attractive (i.e., thin) and, concomitantly, the costs that are associated with being unattractive (i.e., fat) (Morrison, Kalin, & Morrison, 2004, p. 572). Forbes and Jung (2008) cited various sociocultural theorists who have identified Western media as the primary source of the body dissatisfaction that is almost universally found among young women in the developed and developing world.

In addition to sociocultural theory, *social comparison theory* (Festinger, 1954) presents as another standard in which to consider factors influencing body image discrepancies. Festinger proposed this theory to explain comparative judgments concerning one's opinions and abilities. He further suggested that individuals are motivated to compare themselves to specific or general others to assess their own

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social situation. Individuals possess a "drive" to evaluate their situation. When objective measures for evaluating one-self are unavailable, individuals will compare themselves to other people. Furthermore, social physique anxiety may also play a role in self image perception, being defined as an individual's anxiety regarding others' evaluation of physical appearance (Chu, Bushmann, & Woodard, 2008). Morrison et al. (2004) explained that whenever possible, social comparisons are made with similar others (p. 575).

Upward and downward comparisons as defined by the model may be used to explain perception in self image. Making an "upward" comparison (comparing themselves to someone in a higher status group) presumably results in increased dissatisfaction with their position. Conversely, if the comparison is "downward" (comparing themselves with someone in a lower status group) there should be an increase in one's positive feelings (Parker, Haytko, Hermans, 2008). In terms of physical appearance, most social comparison tends to be "upward" rather than "downward" which results in lower levels of perceived attractiveness (Wheeler & Miyake, 1992). The resulting effects of this "upward" comparison were that women tended to engage in traditional dieting practices as well as much more harmful weight control practices (Morrison et al., 2004).

To understand how social comparison theory is salient during the period of adolescence (13-19 years of age) we can turn to the work and ideas of psychologists Erikson and Vygotsky. Austrian (2002) described Erikson's crisis of adolescence as the psychosocial struggle between identity consolidation and role confusion. This notion focuses on the forces at play between looking within the self and observing the external word around. The reworking of the self is central to the experience of the adolescent. As the child begins to utilize judgment and discern relationships, complex meanings can begin to be articulated (Van Der Veer & Valsiner, 1994, p. 259). As adolescents are coming into their own bodies, these meanings become even more intricate as they have to rework not only their own image and judgments about themselves but also discern how the external world judges and views them as well.

Self-discrepancy theory (Higgins, 1987, 1989) provides an alternative model for understanding the social-cognitive transitions in self-representation that occur during adolescence. This theory proposed that different types of chronic discrepancies between the self-concept and different self-guides are associated with different motivational predispositions (Higgins, 1987). The theory also assumed that people are motivated to reach a condition in which their self-concept matches their personally relevant self-guides. This model differentiates between domains of self-representation and inferred perspectives on the self. The domains of self include ideal self (the attributes that the individual or significant other would like him/her to possess), the actual self (the attributes that the individual or significant other believes she/he actually possesses), and the ought self (the attributes that the individual or significant other believe it is his/her obligation or duty to possess) (Strauman & Glenburg, 1994). These same authors suggested that self-discrepancy theory can be useful in understanding body image dissatisfaction in that "self-discrepancies are associated with chronic negative states and with a characteristic readiness to perceive and interpret ambiguous stimuli as relevant to such discrepancies, thus self-discrepancies have the potential to induce negative emotional states associated with body image dissatisfaction and body image disturbances" (p. 106-107).

Gender alone has been given considerable attention in understanding body image disturbances. *Objectification theory* (Fredrickson & Roberts, 1997) suggested that being female in a culture that sexually objectifies the female body causes females to internalize societal assessments of their physical selves. Women are socialized to view their bodies as objects and to internalize an observer's perspective of their own bodies. Self-objectification is hypothesized to increase body surveillance (i.e., self-monitoring) and to have several negative psychological consequences such as increased body shame, appearance anxiety, and decreased experiences of flow states (Fredrickson & Roberts, 1997).

Another similar theory with relevance to gender is *objectified body consciousness theory*. McKinley (1999) conceptualized objectified body consciousness theory as a unified theoretical framework for understanding women's body experience. The psychological construct identified in

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objectified body consciousness theory comprises three dimensions: constant monitoring of how one's body looks (body surveillance), internalization of cultural body standards (body shame), and the belief that one's appearance can be controlled (appearance control beliefs). All three aspects have important implications for women's body esteem (i.e., how one feels about one's body), and the discrepancies between perceived and ideal self. The theory proposed that cultural constructions of the female body, including expectations of physical and sexual appeal, lead to a myriad of negative experiences for women including constant monitoring of their appearance, body shame, negative body esteem, and restricted eating and eating problems (McKinley, 1999; McKinley & Hyde, 1996). The central tenet of objectified body consciousness theory is that the feminine body is socially constructed as an object to be looked at (McKinley, 1999). Body cathexis and situational body image assist in explaining these discrepancies.

Body Cathexis and Situational Body Image

Body cathexis, the degree of satisfaction or dissatisfaction people have with their bodies and their bodies' separate parts (e.g., face, breasts, hips, waist, thighs, feet; Secord & Jourard, 1953), is important to the understanding of body image. Body cathexis is more closely connected to dissatisfaction with the body rather than dissatisfaction with image. Body cathexis is often related to how closely a subject's current body size matches an ideal body size. Satisfaction with selected body parts varies with the amount of deviation between the actual and the ideal. The greater the deviation, the lower the satisfaction with the body (Secord & Jourard, 1955). *Situational body image* should also be considered. As explained by James, 2001 the concept described how *body image* is not fixed but is related to the situation at a particular time. Body image depends on the audience to the activity at the time and whether the physical characteristics and rules of the place itself affect an individual's exposure to that audience. In essence, this connects well with Festinger's social comparison theory (1954) suggesting that when people make upward comparisons, that is, compare themselves with others who are better off on a dimension, they may then in turn regard themselves in a more negative fashion.

The theoretical foundations previously described cannot begin to fully explain the realm of body image disturbances for women and girls however by having an understanding of these concepts we can begin to understand how body image disturbances and body dissatisfaction can play a role in female sporting events, specifically at the high school level, where comparison to other athletes and constant situational changes climax.

Body Image Development

There remains conflicting literature on when body image develops. Furthermore the pervasiveness of body image throughout the lifespan has also recently become a topic of interest. Researchers have traditionally regarded body image development beginning in adolescence, however a growing body of evidence suggests body image and "perceived body image dissatisfaction' occur much earlier in the developmental stages of girls than puberty (Birbeck & Drummond, 2003). Since this study focuses on high-school aged athletes (14-18), I will focus on the adolescent and young adult phases of body image development.

Adolescents

Research into body image among adolescents has documented a continual progression towards a more distorted and negative perception of the body, despite most adolescents being of a normal body weight (O'Dea, 1995). During this time girls become more focused on shaping identity. Davison and McCabe (2006) indicated that females internalize a physique that is more discordant with an internalized female cultural ideal of thinness (p.16). Choate (2007) also cited additional research mentioning that with the considerable weight gains that accompany puberty, girls become concerned about the discrepancy between their developing bodies and the societal ideal for female thinness that is portrayed in Western cultures. These changes are overtly seen as discrepant from the thin ideal.

The extent of these discrepancies among adolescent girls has been explained primarily based on factors influencing appearance and self-esteem. Choate (2007) referenced several studies noting the importance of the relationship among high self-esteem, strong identity, and positive body image,

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suggesting that self-esteem and identity can play a role in the development of body satisfaction. Parents also play an influential role. Research indicates that a girl's perception of her family's approval of her overall appearance is positively related to her body esteem (McKinley, 1999). McCabe and Ricciardelli (2001) discussed the role that parents play in transmitting sociocultural messages of "ideal body" to adolescents. Girls' sense of body satisfaction has also been strongly related to maternal modeling (Choate, 2007).

The linkage between appearance, body mass, and internalized ideals is also clear. Early adolescence is a time in which the onset of puberty brings an average weight gain of 50 pounds in girls, with the majority of the weight being deposited in the hips, waist, thighs, and buttocks; weight gains in these areas are in direct contradiction with the beauty ideal espoused in Western cultures (Levine & Smolak, 2002). Body mass has been found to be the most consistent biological characteristic related to body image satisfaction coinciding with studies that have confirmed that the impact of elevated body mass is experienced as a direct devaluation of one's body image (Jones, 2004). When considering appearance teasing or appearance-based peer acceptance this focus on weight becomes even more significant to body image issues. Media emphasizing female self-worth based on appearance further presents a powerful cultural ideal of female beauty that is becoming increasingly unattainable for females of all ages (Clay, Vignoles, & Dittmar, 2005).

Lastly, gender role socialization processes that occur during adolescence are noteworthy. Choate (2007) explained that girls are often informed early that social popularity and the attraction of partners in a relationship are primary measures of self-worth. This leaves girls vulnerable to others' opinions and pressures them to achieve social approval. Frequently conformity to the beauty ideal is one message to achieve this. In addition to pressures of social popularity, expectations to fill traditional female gender roles such as that of nurturer conflict with notions to conform to society's standards of ideal beauty. Thompson and others indicated that this role creates confusion and that the gender role discrepancy is manifested somatically as body image dissatisfaction (Choate, 2007).

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Body image discrepancies leading to body image disturbances and dissatisfaction can lead to a multitude of consequences in relation to the subjective well-being of female adolescents. Foremost, body image satisfaction during adolescence has received attention because of its significant role as a risk factor in predicting depression, eating disorders, and low self-esteem (Jones, 2004). In addition to dysfunctional eating behaviors and self-esteem issues, a poor body image may impede adolescents' development of interpersonal skills and positive relations with others. Individual self perceptions may also play a role in routine activities, particularly during early adolescence where individuals can be preoccupied with their own appearance and assume that others are very aware of evaluating their appearance as well. In addition, adolescents possibly having a preoccupied mindset can influence feelings about their body image and self-esteem (Davison & McCabe, 2006). Several researchers have also indicated that body image dissatisfaction is associated with emotional distress, obsessive thinking about appearance, unnecessary elective cosmetic surgery, depression, poor self-esteem, smoking onset, and maladaptive eating practices (Choate, 2007).

Emerging Adulthood

The transition from adolescence to early adulthood can be a challenging time with regard to both identity and image. According to Erikson's stages of human development, a young adult is generally a person between the ages of 20 and 40 (1950). Arnett (2004) wrote that the road to adulthood is a long one for today's young people. He stated that this period is not simply an "extended adolescence" nor is it really "young adulthood." He described a new way of thinking termed, *emerging adulthood.* This stage has qualities of identity exploration, instability, self-focus, and feeling in between. Therefore, to understand how body image issues persist past the stage of adolescence, emerging adulthood will remain the period of focus.

College represents an influential time when women in late adolescence are faced with myriad complex physical, mental, social, occupational, and spiritual changes and stressors (Cooley & Toray, 2001), and representations of image may be further skewed. Erikson (1968) believed that a young

woman's identity was determined by the individual as well as others' perceptions of her attractiveness. Intersecting with identity, social interactions and norms play a significant role in shaping image ideals for young adult women. Social interactions with parents, peers, and others can lead to development of body dissatisfaction (Maddox, 2005). Levitt (2004) cited several researchers suggesting that social approval and confidence in one's social situation mitigate body dissatisfaction and because free time and leisure activities consume a considerable amount of college aged adults' lives, leisure participation may also influence identity development (Shaw, Kleiber, & Caldwell, 1995). Many college women seek membership with a group of women who appeal to them (e.g. sororities). Approval and acceptance, though often based on standards of appearance, may become a goal as social connectedness and belonging appear to be particularly important in college (Levitt, 2004).

For many girls, negative body image (i.e. body image discrepancies) worsens as they progress into young adulthood (O'Dea, 1995). Pressures and factors influencing ideal image persist in addition to new identity factors within the young adult age group. Matusek, Wendt and Wiseman (2004) reported several studies among college-age samples that have repeatedly shown that between 72% and 85% of women experience some level of discomfort with the size and shape of their bodies. In addition, further research indicated that approximately half of the women from teenagers to thirty-five years presume they weigh too much, and are striving to lose weight (Depick & Williams, 2004). Similar to the research on adolescents, college women in the United States often internalize ideal cultural representations of the female body and report feeling dissatisfied with their own bodies (Striegel-Moore & Franko, 2002).

Misperceptions regarding female thinness norms also play a critical role in body image discrepancies for college–aged women. Bergstrom and Neighbors (2006) have found that that men are accurate in their perceptions of what women find attractive among men, but women believe men want women to be thinner than men actually report. Furthermore, this inaccurate perception is associated with eating disorder symptomatology. They also noted that women mistakenly believe that other women want to be thinner than they themselves do. Bergstrom and Neighbors (2006) also showed that, "Compared to

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younger college students, these misperceptions were greater among older college students, suggesting that remaining in a college environment for longer periods of time is associated with larger misperceptions regarding female thinness norms" (p. 989). Thus, continued social and comparative pressures further exacerbate self-images discrepant from the thin ideal.

Body image discrepancies can lead to a multitude of factors influencing subjective well-being for college aged young women. Ideals equivocating appearance to social success may lead to fears of exclusion (Levitt, 2004). McKinley (1999) found that body shame and body surveillance, as results of ideal versus perceived image discrepancies, had negative correlations with multiple dimensions of psychological well-being, including autonomy, environmental mastery, personal growth, positive relations, purpose in life, and self-acceptance. Nustad, Adams, and Moore (2008) illustrated how college women with body image dissatisfaction were more likely to smoke cigarettes, use amphetamines, and participate in additional risk taking behaviors including unsafe sexual practices, and general risk behaviors (e.g., driving without a seatbelt, fighting, carrying a gun). Discrepant perceptions in image have also been linked to depression (Bergstrom & Neighbors, 2006) and decreases in physical activity due to self-objectification (Greenleaf & McGreer, 2006).

The presence and development of eating disorders suggests that body image disturbance among young adults is real. From a feminist perspective, this dissatisfaction is problematic to the extent that it can steal resources (e.g., time, attention, monetary resources) from other issues and activities that might empower women rather than making them feel inadequate (Kilbourne, 1994).

Body Image in Female Sport

Research indicated that participation in sports can be beneficial for female adolescents. Benefits include physical benefits, positive effects on educational achievement and mental health, and reduction in risky behaviors (Crissey & Honea, 2003). Though some research suggested that female athletes were no more at risk for eating disorders than nonathletes (Borgen and Corbin, 1987; Harris and Greco, 1990), substantial literature indicated that female athletes are more at risk for body image issues and eating

disorder pathologies than nonathletes. According to Thompson and Sherman (1999), athletes are a subgroup of women who have increased risk because they not only experience general societal pressures regarding thinness, but sport-specific ones as well. Female athletes experience all the same sociocultural pressures that are present for non-athletes placing them at risk for body image issues and eating pathologies; in addition, as athletes, these women also experience unique, sport-related pressures that may independently or in combination increase their risk of developing disordered eating and body image issues (Smith & Petrie, 2008). Pressures from coaches, judges, peers, and personal trainers have been identified as factors leading to stringent dieting and poor eating patterns (Berry & Howe, 2000; Muscat & Long, 2008).

An important cultural ideal that affects all women, and especially athletic women, is femininity. Hegemonic femininity has a strong emphasis on appearance with the dominant notion of an ideal feminine body as thin and toned. This forces the sportswoman to live in two cultures: the sport culture that is inherently masculine and the larger social culture where femininity is celebrated as nonmuscular, petite, and fragile (Krane, Choi, Baird, Aimar, & Kauer, 2004). This battle may be played out specifically in the relationship between athletics and body image and methods of weight control such as pathogenic techniques including diet aids, laxatives, vomiting and fasting (Crissey & Honea, 2003).

Body image is often associated with body composition, particularly among female athletes concerned with meeting the physical requirements of their sports (Muller, Gorrow & Schneider, 2009). For example, altering body composition has become an especially motivating factor for athletes who are not only attempting to augment performance, but also to improve their appearance. In addition, body image is a driving force that influences exercise and dietary behaviors, including supplementing patterns, as athletes strive to meet public expectations and the established ideals for their sport(s). With the ever-increasing number of women participating in exercise and sport, a general desire among women to look more fit and strong has increased (Muller, Gorrow, & Schneider, 2009).

The importance placed on diet as well as body image is a significant source of stress for athletes (Fletcher & Hanton, 2003). Specifically certain judged sports like gymnastics or dance may place athletes at an even greater risk than refereed sports such as basketball or softball. In a refereed sport the athletes' body shape may not be on display as much as it is in other sports; subsequently, it may be easier to focus on each athlete's skill over body shape (Bissell, 2004). In addition athletes who have more tendencies toward perfectionism are at an increased risk for a body image or pathological eating disorder (Schwartz, Gairret, Arguette, & Gold, 2005). Finally, it has also been proposed that coaches, judges, and teammates might encourage unhealthy weight-management behaviors that could spiral into eating disorders (Robinson & Ferraro, 2004).

Coaches and Female Athletes' Body Image

Athletic coaching is practiced by individuals who instruct and work with athletes to prepare them for competition. Coaches are experts on the rules, strategies, and techniques of their sports. These individuals must also know about sports equipment, physical fitness, and safety. Many entry-level positions for coaches require only experience derived as a participant in the sport or activity. Most head coaches within the academic setting must have a bachelor's degree (StateUniversity, 2010). The National Council for Accreditation of Coaching Education (NCACE) promotes and facilitates coaching competence within all levels of amateur sport by overseeing and evaluating the quality of coaching education programs (NCACE, 2010); however, to coach an individual does not have to graduate from an accredited coaching program. Most coaches in the public school setting must meet individual state requirements for certification. Certification may not be required for private school jobs.

Studies focusing on high school coaches and body image are few; however, there is research on this topic for coaches of mature female athletes. For example, eating disorders were more prevalent among elite athletes who started on an unsupervised dieting program after being told to lose weight by their coach (Sundgot- Borgen, 1994). An additional study of college women tennis players indicated that coaches had a slightly negative attitude toward overweight individuals (Harris, 2000). In a survey of

collegiate coaches, Heffner, Ogles, Gold, Marsden, and Johnson (2003) found that a substantial proportion of coaches engage in some form of monitoring or weight management behaviors with their athletes.

The majority of the literature referring to coaches and female athletes within the realm of body image focuses on collegiate female athletes. In a study by Lassiter and Watt (2007) senior physical education and sport majors' knowledge, attitudes, skills, and behaviors related to the female athlete triad were surveyed. This triad is comprised of three components; osteoporosis, menstrual dysfunction, and an eating disorder, causing acute and chronic health problems for physically active females. Results of the study concluded student coaches tended to be unsure about whether their personal beliefs about body image affect the athletes that they coach. Comparisons of responses across gender of student coaches revealed the greatest number of significant differences. For the most part, female coaches were more knowledgeable, had more appropriate attitudes, and were more likely to participate in prevention and intervention behaviors than male student coaches. These results imply the importance of gender in the coaching of the female athlete in issues surrounding body image.

In a large scale NCAA (National Collegiate Athletic Association) coaches survey, collegiate coaches were asked to consider how female athletes with disordered eating or eating disorders are identified, how coaches are involved, and the identification criteria used. The study indicated that athletic trainers, teammates, and coaches are frequently involved in identification of eating disorder pathologies. Eating disorder symptoms were most often used to identify symptomatic athletes, and athletes from high-risk sports were more often identified. Implications were discussed in terms of education and training of coaches and athletic trainers (Sherman, Thompson, DeHass, & Wilfret, 2005). This study also discussed how a large proportion of coaches were engaging in weight monitoring or weight management with their athletes, or were treating athletes with eating disorder symptoms themselves. The study also conveyed

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the relevance of the power and influence of the coach over the student athlete and makes specific reference as to how this position places coaches in a key position for identification of eating and body image issues.

Coaches and athletes recently shared their thoughts and suggestions in a document from the Coaches Association of British Columbia titled "*Coaching Female Athletes*." The following statements provide several examples of coaches and athletes comments and suggestions for coaching female athletes. Athletes commented how, "body image affects everything, including your performance." They also remarked that "coaches should be open and supportive, much like a friend," and that "coaches should not let athletes get down on themselves."

Coaches also shared their thoughts regarding the coaching of female athletes. Coaches' statements included how coaches must "understand that females often internalize comments about their bodies, taking them as reflections on their personalities or self-worth rather than motivations." That coaches should "build self confidence by providing athletes with a chance to progressively develop and master skills (this is essential when coaching females); if they don't see progress they may not want to continue." That coaches must "understand that weight gain is a normal part of puberty and adolescence for females; your athletes may feel self-conscious about their bodies already." Statements also included "allowing girls and women to have a say in their uniforms for competition; this could have an impact on their participation and may deter them from competing if they feel uncomfortable in the uniforms." And finally "The most important assistance coaches and friends can offer is to help them develop positive self-images and balanced lifestyles, both of which are conducive to better athletic performances and greater female participation."

Though coaches play a role in identifying symptomatic athletes, they do this much less frequently than teammates and athletic trainers (Sherman, Thompson, DeHass, & Wilfret, 2005). For example, participation in team sports can contribute to the development of disordered eating through teammates' encouragement to engage in pathogenic weight-loss methods, such as the use of laxatives, diet pills,

diuretics, and/or engaging in self-induced vomiting (Rosen, McKeag, Hough, & Curley, 1986).

According to Thompson and Sherman (1993), subjective data supports the view that a contagion effect--eating disturbances spreading from one person to another--often operates within athletic teams. Similarly, competition between teammates to lose weight and the reinforcement of pathological eating behaviors have been identified as potential factors affecting the onset of disordered eating (Chopak & Taylor-Nicholson, 1991). Athletic trainers also play a role in this cycle.

Athletic Trainers' and Female Athletes' Body Image

Athletic training is practiced by athletic trainers who collaborate with physicians to optimize activity and participation of patients and clients. According to the National Athletic Trainer's Association (NATA), athletic training encompasses the prevention, diagnosis, and intervention of emergency, acute, and chronic medical conditions involving impairment, functional limitations, and disabilities (2008). Students who wish to become certified athletic trainers must earn a degree from an accredited athletic training education curriculum. Accredited programs include formal instruction as well have the opportunity for additional learning experiences through clinical education opportunities (NATA, 2008). The American Medical Association (AMA) has recognized athletic training as an allied health care profession since 1990.

Certified athletic trainers must have at least a bachelor's degree in athletic training. Students must also pass a comprehensive exam before earning the ATC credential as well as keep their knowledge and skills current by participating in continuing education. Professionals in this arena must also adhere to standards of professional practice set by one national certifying agency. Various daily duties of an athletic trainer include:

- Provide physical medicine and rehabilitation services
- Prevent, diagnose, treat and rehabilitate injuries (acute and chronic)
- Coordinate care with physicians and other allied health professionals

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- Work in schools, colleges, professional sports, clinics, hospitals, corporations, industry, military, performing arts (NATA, 2008)

Professionals in athletic training vary from that of personal training through both the education required as well as the duties they perform.

In addition to the research on coaches, collegiate athletic trainers' knowledge and behaviors have been studied to some degree with respect to both the confidence in dealing with eating disorders and body image issues as well as knowledge in these areas. For example, Vaughan, King, and Cottrell (2004) reported that 91% of athletic trainers had dealt with an eating disorder while only a very small percentage felt confident in managing or asking an athlete if they had an eating disorder. Furthermore they detailed that 93% of athletic trainers found that increased attention needs to be paid to preventing eating disorders among college female athletes. A more recent study reviewed perceptions and knowledge of collegiate athletic trainers' regarding disordered eating, finding that most report it to be a problem in the structured sport setting and that athletic trainers' need knowledge in the domains of disordered eating (Thompson, Yingling, Boardley, & Rocks, 2007).

Implications of the findings from previous studies (Sherman, Thompson, DeHass, & Wilfret, 2005; Vaughan, King, & Cottrell, 2004) center on the importance, of coaches and athletic trainers in both the identification and management of eating disorders among athletes. Athletic trainers are the individuals who more often have responsibility for making the very difficult decisions regarding whether a symptomatic athlete will be allowed to train and compete (Sherman, Thompson, DeHass, Wilfret, 2005). Additional studies have suggested how athletic trainers should manage these issues, suggesting that body image and eating disorder identification and management should be a primary job role for the athletic trainer (Leone, Sedory & Gray, 2004). The NATA has a position statement explaining the role of the athletic trainer in this area (Bonci, Bonci, Granger, Johnson, Malina, Milne, Ryan, & Vanderbunt, 2008) The NCAA has also provided suggestions to athletic trainers on how to manage these roles.

Suggestions include:

- Emphasize that student-athlete welfare and health is a priority within the athletics program;

- Educate athletics department staff members that nutrition, body composition and body image are current issues of concern within the collegiate student-athlete population;

- Provide, identify and encourage the use of on and off-campus resources for student-athletes to utilize regarding nutrition, performance, mental health, and body image;

- Continue education of current issues involving nutrition, performance, and body image and provide the information to student-athletes, coaches, and administrators;

- Advise coaches that team weigh-ins or body composition measurements are not acceptable.

The National Eating Disorders Association also has a resource toolkit for coaches and athletic trainers.

Implications for this Study

Body image dissatisfaction may lead to more extreme eating disorders for an individual. Athletes, specifically adolescent and young adult athletes, are not excluded. Athletic trainers and coaches have the opportunity to impact high school aged female participants, however we do not fully know what role these professionals play a role in either ameliorating or exacerbating body image disorders, particularly at the high school level. Athletic trainers and coaches play significant roles in both the physical and psychological health of their athletes. While we know these professionals can influence participants' body image, we know little about this influence at the high school level, a time most salient in body image development. Furthermore, we know even less about how the professional perspectives of coaches and athletic trainers compare, and if these professionals can recognize or feel it is their responsibility to recognize such issues.

To prevent escalation of body image issues in female athletes and to develop appropriate curriculum for professionals who coach and work with these athletes, the perspectives athletic trainers coaches and female athletes should be better understood. Therefore the purpose of this study is to better understand the knowledge, beliefs, and experiences of coaching and athletic training professionals with regard to eating disorders and body image in female athletes at the high-school level. The knowledge base and perceptions of coaches and athletic trainers with respect to body image will be compared to help

determine this relationship. Furthermore, the perspectives of collegiate female athletes will also be assessed to offer a unique reflection of body image related experiences concerning previous high school coaches and athletic trainers as well as to evaluate body image perceptions of this population. Current curricula and accreditation standards from coaching and athletic training fields will also be reviewed in order to provide a unique perspective in which to determine the preparation of these professionals related to body image and eating disorders. Given that these individuals influence the lives of female athletes during the influential time prior to entering college, these individuals should be examined.

Chapter 3: Methodology

This chapter revisits the purpose of the study, the research questions for which direct data collection occurred, the research design, and lastly a description of the methods and procedures that were used in the study. Specific consideration is given to the following discussions: 1) participant sample and selection, 2) data collection, 3) instrumentation, and 4) data analysis procedures.

Overview of the Study

The first purpose of this study was to determine what training high school professionals who work with female athletes receive within the realm of body image and eating disorders that prepare them to work with adolescent female athletes. A second purpose of the study was to determine high school coaches' and athletic trainers' knowledge of eating disorders, experience with eating disorders, and beliefs surrounding the responsibility in the identification of these disorders, as compared to previous studies on collegiate professionals. Previous studies have indicated that collegiate professionals have a negative impact on or feel unprepared to handle issues in this arena; in this study I wanted to determine if this is also true of professionals in the high school arena. And finally, as the third and most significant purpose of the study, I wanted to assess the perspectives of collegiate females who have previously participated in high school athletics with regard to body image related experiences concerning previous high school coaches and athletic trainers.

Specifically, the research questions that guided the study include:

> (1) What policies and educational components are present in the training of professionals (high school athletic trainers and coaches) with regard to the identification and management of body image and eating disorders?

(2) What perspectives do professionals working with high school-aged female athletes possess regarding the identification and management of issues surrounding eating disorders?

(2a) What experiences have professionals had working with high school-aged female athletes with eating disorders?

(2b) What beliefs and knowledge do professionals possess in the identification and management of eating disorders in high school-aged female athletes?

(2c) What attitudes do professionals possess about their personal responsibility in the management of eating disorders in high school-aged female athletes?

(2d) What differences exist between athletic training and coaching professionals regarding the identification and management of eating disorders?

(3) What are the needs of high school-aged female athletes relating to body image issues and eating disorders during their experience in high school athletics?

(3a) What experiences have former high-school female athletes had with body image and eating disorder issues?

(3b) How did professionals (coaches and athletic trainer's) at the high school influence these experiences?

(3c) What recommendations would former high-school female athletes have for professionals working at this level?

The study followed a mixed-methods research design. To lay a foundation for the study, a curriculum scan identified body image and eating disorder components of athletic training and coaching curricula from post-secondary institutions within the state of Georgia. This information documented what is currently being offered as far as preparation for coaches and athletic trainers in the field. As a second component of the study, online questionnaires were sent to high school athletic trainers and high-school coaches within the state of Georgia to obtain their experience with and knowledge about eating disorders

and body image. Lastly, collegiate females who have previously participated in high school athletics were invited to participate in focus group interviews to determine previous experiences pertaining to body image and eating disorders with regard to coaches and athletic trainers during the high school experience. It was my hope that the interviews add insight and understanding to the information obtained from the professionals' questionnaire in order to enrich curriculum materials.

Curriculum Scan

As an initial purpose, I wanted to determine what training athletic training and coaching professionals currently receive within the realm of body image and eating disorders that prepare them to work with female athletes. It was my hope that the curriculum scan would identify any existing body image components of athletic training and coaching curricula from post-secondary institutions within the state of Georgia; therefore, the study began with a curriculum scan of colleges and universities in Georgia that offer an undergraduate degree or specialization in coaching and athletic training. Colleges and universities in Georgia were chosen in an effort to limit the sample since I feel that Georgia was representative of other states offering similar degrees.

Sample and Selection

The intended sample for this study included all public and private institutions within the state of Georgia that house an undergraduate accredited athletic training education program or offer an undergraduate coaching degree or specialization. Undergraduate programs were selected to assess curricula for the entry level athletic trainer or coaching professional.

Identification of schools that offer accredited degrees in athletic training was straight forward. For athletic training, The Commission on Accreditation of Athletic Training Education (CAATE) is the agency responsible for the accreditation of professional Athletic Training Educational Programs. A student must graduate from an accredited program to sit for the National Athletic Training Board of Certification (NATABOC) exam. The passing of this exam is required for *all* practicing athletic trainers.

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By visiting the CAATE website and searching accredited programs in Georgia, only five schools were identified as accredited Athletic Training Education Programs (Appendix A).

Identification of coaching degrees and specializations was not so straightforward. Though students may graduate from an accredited coaching program, coaching students are not bound by the same certification and licensure standards as athletic trainers, therefore the identification of coaching programs was expanded beyond accredited coaching programs to include all institutions (public and private) that offer a coaching degree or specialization.

To identify accredited coaching programs, The National Council for Accreditation of Coaching Education (NCACE) was used. NCACE endorses comprehensive standards for sport practitioners and through accreditation provides leadership and guidance to coaching educational providers. This council acknowledges only one accredited coaching program within the state of Georgia (Appendix A).

Given that coaches are not bound by the same certification and licensure standards as athletic trainers,' additional coaching degrees and specializations were identified to broaden the sample. To find public institutions that offer a coaching degree or specialization, I typed in *Degrees and Majors* in the search box on the University System of Georgia home page. From the Degrees and Majors page I typed in *coaching* in the "search degrees by keyword" box. Two undergraduate public programs were found (Appendix A). To find private institutions that offer coaching degrees or specialization, I visited each of the 25 private institutions web pages listed on the *Georgia Foundation for Independent Colleges* website, and followed the links to corresponding degrees and majors. An additional three total schools were identified offering a coaching degree or minor (Appendix A).

In total, five athletic training education programs and six coaching programs were assessed.

Data Collection

Programs of study were reviewed for the respective degrees of each of the institutions identified in Appendix A to determine any course in which body image and/or eating disorders may be covered. Special attention was given to courses with descriptions that include topics on medical conditions,

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psychology, issues in programming, and growth and development. Courses that were included are as follows: General Medical Conditions, The Developing Individual, Healthful Living, Foundations of Exercise and Sport Psychology, and Current Issues in Sport Psychology. Course descriptions and syllabi were accessed through institution program links, course catalogs, or faculty web pages in an attempt to determine if body image or eating disorder education is included in the curriculum. General Education courses, courses taken as core requirements for the institution, as well as electives were excluded in the review in an effort to determine body image and eating disorder content within the core programs of study. Terms that were used as indicators to determine if body image topics are included in the curriculum are as follows: body image, eating disorders, anorexia athletica, and women's health issues. Women's health issues were explored further to determine if components of body image are included in the curriculum.

Program coordinators or faculty members of the respective courses were also contacted via email to determine curriculum content. Email addresses were identified from each institution's web page. In the email I introduced myself, provided a brief explanation of my study, and asked the faculty if and how body image and eating disorder education is integrated into their respective curriculum (Appendix B). The aim was to determine if curricula provide an integration of or a specific course that addresses body image and eating disorders.

As an adjunct to the curriculum scan I also reviewed accreditation standards for the two professional areas (athletic training and coaching) to determine if body image or eating disorder education is identified as a component. This may lead to future pedagological implications as I hoped to be able to provide an overview of how well graduates from these programs here in Georgia are grounded in body image and eating disorder content.

The results are outlined in a three part form. Foremost, data are presented in chart form with the schools listed. Courses are identified in which content area relating to body image and eating disorder information is included in the curricula. The second part of the results examines open commentary from

educators' responses. Finally, any language pertinent to body image and eating disorders found in accreditation standards of both professions is presented.

<div align="center">**Professionals Questionnaire**</div>

A second purpose of the study was to determine if differences exist between high school coaches and athletic trainer's knowledge of eating disorders, experience with eating disorders, and beliefs surrounding the responsibility in the identification of these disorders, compared to previous studies on collegiate professionals. Previous studies have indicated that professionals have a negative impact or feel unprepared to handle issues in this arena; in this study I wanted to determine if this is also true of professionals in the high school arena. I surveyed certified high school athletic trainers and high-school coaches in Georgia who work with high-school aged female participants within the realm of physical activity to assess their understanding of and experience with eating disorders and body image.

Participant Sample and Selection

To limit the sample, all participants surveyed were employed by institutions within the state of Georgia. All private and public high school institutions in Georgia were included. I accessed contact information for high school athletic trainers and coaches through the list of member schools from the *Georgia High School Association (*424 schools) website as well as the *Georgia Independent School Association* (164 schools) website. Out of the 588 schools I anticipated most schools to have at least three coaches devoted to female athletics (1764 possible survey participants). Athletic trainer employment is much less; however I anticipated 25% of the schools having a certified athletic trainer on staff (176 possible survey participants). Therefore by using an approximate 26% response rate standard as identified in literature (Hamilton, 2009; Johnson & Owens, 2003) I anticipated approximately 500 possible survey responses.

By visiting each school's website I searched the staff directory to determine the availability of a coach or athletic trainer, names of these individuals, and the respective email addresses. The *Georgia Athletic Trainer's Association* member list also served as an additional resource in order to identify high

school athletic trainers within the state who may not be listed on individual school websites. Any individual, male or female, within a high school who coaches a female centered activity or sport such as cheerleading, cross country, golf, tennis, track and field, volleyball, gymnastics, swimming and diving, soccer, and softball was included in the sample. In addition, all athletic trainers who work in high schools were included in view of the fact that they cover both male and female sports and physical activity at their schools.

Data Collection

Following Institutional Review Board approval from the University of Georgia and Georgia College and State University, initial contact with the participants was made via email to invite individuals to complete the survey (Appendix D). An online link to a questionnaire on Survey Monkey was provided in this email to all high school athletic trainers and coaches from the sample as described above. The email included a statement of why the professionals were receiving the email as well as an explanation of the goals of this research. In the event that the professionals did not work with female participants, the individuals were invited to forward the questionnaire to coaches and instructors who work with high school-aged female athletes. Though this presents an issue of an unknown sample size, my goal was to reach as many high school coaches and athletic trainers as possible who work with female athletes.

As the survey administrator, I kept confidential the email addresses of respondents. I also exercised caution to prevent access by others to survey data in my possession. A three-wave emailing design was used to increase response rate. An initial email was sent explaining the study with the survey link. A second email reminder was sent to participants two weeks after the initial email. Finally, a third emailing was sent two weeks after the second email reminder. All questionnaires were self-report.

To increase response rate of the questionnaire, a $50 dollar Amazon gift card was used as an incentive. During the initial email the gift card was explained and participants were asked to provide their email address on the questionnaire if they wished to be included in the drawing. One grand prize winner was drawn randomly from the list of email addresses as obtained from each questionnaire. Upon the

drawing, the winner was contacted via email and a physical address was requested in order to send the gift card. The gift card was sent within one week of obtaining the physical address.

Instrumentation

After a comprehensive review of the literature, no one survey instrument was identified to address both coaches' and athletic trainer's knowledge, beliefs, and experiences of eating disorders, especially at the high-school level. Therefore a combination of two studies was used to guide questions related to knowledge, confidence, and beliefs in eating disorder issues for professionals who work with female athletes. The first study that was drawn on was Vaughan, King, and Cotrell's (2004) study examining college athletic trainers' confidence in helping female athletes who have eating disorders. Their instrument consisted of a 4-page, 53-item questionnaire using Bandura's self-efficacy model to examine athletic trainers' efficacy expectations, outcome expectations, and outcome values regarding female athletes with eating disorders. In addition to this survey, the 2003 National Collegiate Athletic Association (NCAA) Questionnaire for Collegiate Coaches of Female Student-Athletes (Sherman, Thompson, Dehass, & Wilfert, 2005) was drawn on for questions relating to knowledge and management of eating disorders. Lastly, eating disorder myths provided from the National Eating Disorder Association (2008) were presented in an effort to assess knowledge and belief components about eating disorders.

In an effort to use a similar valid and reliable measure as the questionnaires identified in the studies above, and to ensure a process for the development and validation of questions, the survey was constructed to include 20 questions related to the current study specifically regarding previous education in these issues as well as questions surrounding knowledge of and responsibility in the recognition of body image issues. Please see Appendix E for a copy of the questionnaire.

The first section in the questionnaire included a list of eight questions related to demographics including gender, role identity (coach or athletic trainer), experience, and education. The next section focused on eating disorder and body image perspectives of the professionals. Twelve questions were

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asked inviting the participants to elaborate about their own experiences with these issues and to assess how body image and eating disorder issues can affect performance. The majority of responses were captured in yes or no format or on a 5-point Likert scale from strongly disagree to strongly agree. Open ended questions and additional room for explanation were also included for more qualitative responses.

Vaughan, King, and Cotrell's (2004) study provided the framework for outcome and efficacy expectation questions as well as outcome value questions regarding female athletes with eating disorders. Sherman, Thompson, Dehass, and Wilfert's 2005 study provided an outline for the construction of questions related to perceptions of disordered eating behaviors and the professionals role in recognizing disordered eating. Questions were pilot tested for face and content validity in a pilot test administered to nine Georgia College and State University (GCSU) senior athletic training students and physical education students representing an entry-level professional standpoint. GCSU students were used for convenience sampling since these students are at my current institution of employment. Wording of some questions was changed pending the results of the pilot test to ensure appropriateness.

Data Analysis Procedures

All questionnaire items were coded and entered into the SPSS/PAWS statistical analysis software program. Initial demographic and background information as identified by the questionnaire was compiled through descriptive statistics. Additional analyses determined knowledge of professionals surrounding body image and eating disorders working with high-school aged female participants. Furthermore, confidence in the identification and management of these issues was also be analyzed. The second component of the online questionnaire included items specifically related to time and experience working with female participants. Qualitative analysis of the open-ended questions focusing on experience and beliefs was coded and worked with independently.

Foremost, I was interested in determining what experiences professionals have had in the field and ultimately wanted to compare the results of this questionnaire with what has previously been published regarding the collegiate level.

Athlete Focus Groups

Focus groups work when participants feel comfortable, respected, and free to give their opinion without being judged. The intent of the focus group is to promote self-disclosure among participants (Krueger & Casey, 2009, p 4). The purpose of a focus group is to listen and gather information and to better understand how people feel or think about an issue. Therefore, focus groups seemed best appropriate for this discussion to alleviate uncomfortable disclosures that might occur in a one on one interview setting. Focus groups were conducted to assess the perspectives of collegiate females who have previously participated in high school athletics to offer a unique reflection of body image and eating disorder related experiences concerning previous high school coaches and athletic trainers. This component of the study allowed me to explore in depth the "lived experiences" of the athletes in order to identify the needs of high school-aged female athletes concerning body image and eating disorders.

Krueger and Casey (2009) suggest that the goal of a focus group is to find the range of opinions of people across groups; in order to do this, at least three groups are needed. For this study three focus groups were held, one at The University of Georgia and two at Georgia College and State University.

Participant Sample and Selection

Focus group participants were invited to participate through email posted on student listservs, invitations posted on bulletin boards at Georgia College and State University and University of Georgia campuses, and through announcements made to undergraduate courses. The Student Announce listserv was used for GCSU students while the Women's Studies listserv was used at UGA. In the initial invitations, an explanation of the purpose of the focus group was provided. Participants were asked to respond to me via email or phone to express interest in these focus groups. Ultimately I looked to find individuals with past experience, both positive and negative, with coaches and athletic trainers in issues surrounding body image. The first focus group at Georgia College and State University included four participants while the second group included ten. Five participants were involved in the group at the University of Georgia. Participation in the groups was not compensated. Participants included women

who had come from both public and private school high schools, larger and smaller division type schools, as well as representation from different areas in the state (Greater Atlanta, South Georgia, Middle Georgia, Athens area). Saturation of information was considered during the process to determine if additional focus groups were necessary (Seidman, 2006). Ethics approval was secured through the research ethics board at both The University of Georgia and Georgia College and State University.

Data Collection

Initial contact was made with me by interested focus group participants via email expressing interest in the group. My reply included an explanation of the purpose of the interview and an indication of the format and length of the interview. I then waited on a response to determine the willingness of an individual to participate in the focus group. An additional informed consent form was provided at the beginning of the focus group (Appendix F). I determined the focus group time and location based on the schedule of participants who were interested. A quiet setting was chosen in order to ensure minimal distractions. Respondent comments were written in real time and digitally recorded. Clarifications were requested as needed.

Instrumentation

Focus group interviews used the semistructured protocol to provide a rich, thick description of the athlete's experiences (Burgess, 1982). Following a qualitative protocol, the focus group interviews were conversational in nature though the interview guide questions (Appendix G) were carefully predetermined and sequenced following a general-to-specific questioning route (Kreuger & Casey, 2009). Topics discussed and the specific questions and probes varied with the flow of the conversation (Fontana & Frey, 2000). The interview questions were designed to encourage the former athletes to describe their experiences within their respective sporting environments. Participants were reminded that there was "no right answer" given that I was not trying to reach a consensus from the group. The interview guide addressed body image concepts, specifically focusing on aspects of the social context in which the athletes have had experiences with professionals pertaining to elements of body image (Appendix G).

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Items considered for the interview guide included encounters with professionals, additional body image issues such as low-self esteem and eating disorders, critical comments made by professionals, as well as others as identified by the participant. Specifically situations in which a coach or athletic trainer was involved were highlighted.

Data Analysis

As an individual who works within the field of body image and eating disorders, and as someone who has experienced these issues first hand, I am inclined to take a social constructivist perspective to the analysis of the data. This epistemological orientation posits that much of reality and the meaning and categories that frame everyday life are essentially social creations (Sayre, 2001). In particular, I feel that eating disorders and body image issues are inherently social creations. To outline the actual analysis of the data, Krueger and Casey (2009) discuss how focus group analysis must be systematic, sequential, verifiable, and continuous (p. 128). *Systematic* analysis means that the analysis is deliberate and planned as well as documented and able to be clearly articulated. *Sequential* implies that the analysis is an evolving process. *Verifiable* suggests that another researcher should be able to arrive at similar conclusions based on the data; hence there must be sufficient data to constitute a trail of evidence. Lastly, *continuous* means that analyzing the data is not just a single event but an ongoing process that requires considerable time and flexibility to go back to the data.

For purposes of this study a transcript based analysis was used with supplemental field notes that I completed as the moderator. I completed transcription in order to not lose the essence of the group discussion that may be lost by having another individual transcribe the recordings. I chose, as a visual learner, to use the long table approach to data analysis suggested by Morgan, Krueger, and King (1998). I began by gathering my transcripts. I had two copies of each. During this process one was cut up, while the other stayed intact. A transcript from a particular focus group was on colored paper of one type while that of another group was of a different color. I read through each transcript prior to the analysis making note of any ideas, themes, or word choices. To begin the long table analysis I identified questions at the

top of flip chart paper and placed these on the wall. I then began cutting and pasting the responses from the different groups that connected with the questions on each flip chart page. I looked over each question and begin to consider categories/themes within each page. To add further, I wrote brief descriptive summaries from each page identifying similarities and differences between the comments. Finally, I arranged the themes/categories into a sequential order that helped me address the research questions being asked.

Summary

In summary, this study was threefold. The curriculum scan took a look at public and private institutional curriculum within the state of Georgia that house an undergraduate accredited athletic training education program or offer an undergraduate coaching degree or specialization. Program curricula and accreditation standards were reviewed to determine if body image and eating disorder information is an integrated component. Email responses from athletic training and coaching program coordinators also provided additional data.

The second component of the study included a survey to athletic trainers and coaches of female athletics employed by both public and private school institutions within the state of Georgia. A 3-wave email design was utilized to encourage a high response rate. The questionnaire attempted to gather data on basic demographics of the professionals, experiences the professionals have had within the realm of body image and female athletics, comfort level in dealing with such issues, and any resources the professionals may find useful to assist with body image and eating disorders. Both qualitative examination as well as the use of SPSS for quantitative responses were used for data analysis purposes.

Lastly, focus groups were conducted with Georgia College and State University and University of Georgia former female high school athletes. These groups attempted to assess the perspectives of collegiate females who had previously participated in high school regarding experiences with body image and eating disorders and the professionals that worked with them. In total, a combination of three focus

groups with four to ten participants were conducted. An interview guide was used to structure the group

interviews. Qualitative coding was used to determine themes from the interview data.

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Chapter 4: Curriculum Scan Results

This chapter examines the curricula and accreditation standards from coaching and athletic training fields to understand the extent of training that professionals currently receive about body image and eating disorders. The study began by identifying colleges and universities in Georgia that offer an undergraduate degree or specialization in coaching and recreation. Course descriptions and syllabi were accessed through institution program links, course catalogs, or faculty web pages in an attempt to determine if body image or eating disorder education is included in the curriculum. Accreditation standards for each profession were accessed via professional websites. Thus, accreditation standards, program curricula, and information provided in emails from program coordinators form the basis for assessing the first research question, "What policies and educational components are present in the training of professionals (high school athletic trainers and coaches) with regard to the identification and management of body image and eating disorders?"

Accreditation Standards

Accreditation status is awarded when a coaching or athletic training education program successfully demonstrates that its collective program meets the applicable standards. For coaching, the National Council for Accreditation of Coaching Education (NCACE) grants accreditation to educational programs that meet or exceed the minimum requirements. NCACE works to establish, promote, and maintain the quality of educational programs for sport coaches. Similar to NCACE, the Commission on Accreditation of Athletic Training Education (CAATE) develops, maintains, and promotes appropriate minimum standards of quality of entry level Athletic Training education programs.

Both the NCACE and the CATTE have established standards guiding curriculum. For NCACE, the National Standards for Sport Coaches (NSSC) provides a framework that can be applied and used to identify coaching competencies within the structure and context of any sport or coaching program. For

the CATTE, the 4th edition of the National Athletic Trainers' Association Athletic Training Educational Competencies currently provides educational program personnel with the knowledge and skills to be mastered by students in an entry-level athletic training educational program.

Coaching Standards

The NSSC has developed forty national standards for sport coaches categorized into eight domains. The eight domains are as follows: Philosophy and Ethics, Safety and Injury Prevention, Physical Conditioning, Growth and Development, Teaching and Communication, Sport Skills and Tactics, Organization and Administration, and Evaluation. At a quick glance the domains highlight professional accountability, practice and competition design, sport skills, risk management, and evaluation. A summarized version of each domain and associated standards is more fully explained in Appendix H.

Of these eight domains, Physical Conditioning provides the best resource to answer Research Question 1. This domain comprises Standards 12-15 that highlight the importance of using scientific principles in designing and implementing conditioning with specific attention to body composition, weight management issues, and the role physical conditioning plays related to injuries. In associated benchmarks, the standards state that the coach must understand and teach appropriate nutrition and weight management practices. The standards also stress the importance of counseling athletes about healthy eating in relation to sport performance and to maintain proper nutrition and hydration for fueling the body. Standard 13 and its accompanying benchmarks provide additional detail related to the research question. Standard 13 states, "Teach and encourage proper nutrition for optimal physical and mental performance and overall good health."

The benchmarks within Standard 13 are as follows:

- Assist athletes in timing and selection of food options to fuel optimal energy production for practices and contests.

- Assist athletes in regulating safe levels of hydration.

- Provide accurate and timely information to athletes and parents/guardians about sound nutritional principles as part of training and preparation for competition.

- Provide accurate and timely information about body composition and healthy weight management.

- Be proactive in identifying potential eating disorders and referring athletes for appropriate professional assistance.

Thus the Physical Conditioning domain and the associated standards and benchmarks addressing sound nutrition, healthy weight management, and the identification of potential eating disorders substantiate that educational components of nutrition and eating disorders should be included in curricula for the training of coaching professionals.

Athletic Training Educational Competencies

The Athletic Training Educational Competencies provide athletic training faculty a guide to the knowledge and skill requirements to be mastered by students in an entry-level athletic training educational program. The Competencies are categorized according to twelve content areas comprising the role of the certified athletic trainer. These content areas are presented in Appendix I with additional explanations about how they apply to the entry-level athletic trainer. To deconstruct even further, each content area is elaborated even further to include the following behavioral classifications:

- Cognitive Competencies (knowledge and intellectual skills)

- Psychomotor Competencies (manipulative and motor skills)

- Clinical Proficiencies (decision-making and skill integration)

Cognitive and Psychomotor Competencies are written using behavioral objectives classified on the lower end of Bloom's Taxonomy to assess a student's basic level of knowledge and skill. Cognitive objectives will usually be taught through a didactic classroom experience while psychomotor objectives are taught in a lab setting. Clinical proficiencies integrate decision-making and skill demonstration, which challenge the student's higher levels of thinking and skill performance. These proficiencies are

traditionally evaluated through a student's clinical experience working with clients outside the academic institution. For athletic training education students, all required proficiencies must be met prior to graduation. Thus the guidelines are set up for educational programs to provide a sequential order of skill acquisition; students learn the concept, demonstrate the skill, and then integrate the skill into practice.

Of the twelve content areas, the Psychosocial Intervention and Referral and Nutritional Aspects of Injuries and Illnesses areas best address the first research question. The content areas with the associated cognitive competencies and clinical proficiency requirements are provided in detail in Appendix J. Intervention and referral and nutrition are areas that specify the entry-level athletic trainer must possess the ability to recognize, intervene, and refer when appropriate, patients exhibiting sociocultural, mental, emotional, and psychological behavioral problems/issues. These areas also specify that students must possess an understanding of the nutritional aspects of injuries and illnesses. Within the Psychosocial Intervention and Referral area, the tenth cognitive competency best addresses these issues entailing the identification of and factors associated with eating disorders. In addition to the cognitive competency, the first of two clinical proficiencies under this area specify that the student conduct an intervention and referral for such issues. The twelfth and fourteenth cognitive competencies under The Nutritional Aspects of Injury and Illness area specify that student explain methods of weight control and describe disordered eating. Here, the clinical proficiency stresses the recognition of these issues. No psychomotor competencies were identified. Thus, if adhering to The Athletic Training Educational Competencies, accredited athletic training education programs should provide students the opportunity for knowledge and skill acquisition in relation to the recognition, intervention, support, and referral of disordered eating and eating disorders.

Standards Summary

In summary, reflecting on the first research question, *What policies and educational components are present in the training of professionals (high school athletic trainers and coaches) with regard to the identification and management of body image and eating disorders?*, we will find that both professions

position the educational institutions to prepare students to identify and refer these issues.   For coaching

professionals, the Physical Conditioning domain and specifically Standard 13 and its related benchmarks

define this expectation. For athletic training professionals, the Psychosocial Intervention and Nutrition

content areas and the connected cognitive competencies and clinical proficiencies address the recognition,

referral, and management of these issues. Therefore students graduating from an institution in Georgia

with a coaching or athletic training degree should have been exposed to concepts, practice, and

proficiencies in the identification and management of eating disorders. Furthermore, athletic training

requirements afford students the opportunity to go beyond the cognitive identification of these issues and

integrate the skills into clinical practice.

Program Curricula

Identification of schools that offer accredited degrees in athletic training was straight forward.

By visiting the CAATE website and searching accredited programs in Georgia, only five schools were

identified as accredited Athletic Training Education Programs (Georgia College and State University,

North Georgia College and State University, Valdosta State University, The University of Georgia, and

Georgia Southern University). Undergraduate programs were selected to assess curricula for the entry

level athletic trainer.

To identify accredited coaching programs, The National Council for Accreditation of Coaching

Education (NCACE) was used. This council identifies Georgia Southern University as the only

accredited coaching program within the state of Georgia; however Georgia Southern University had a

certificate graduate program rather than an undergraduate program so was removed from the study. To

find other public institutions that offer a coaching degree or specialization, I typed in *Degrees and Majors*

in the search box on the University System of Georgia home page. Two undergraduate public programs

were found (Georgia College and State University, and North Georgia College and State University).

GCSU was removed from the study because it had discontinued the coaching minor and their Physical

Education concentration had moved to a Masters in Arts in Teaching for Physical Education, again a

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graduate degree instead of an undergraduate degree. To find private institutions that offer coaching

degrees or specialization, I visited the *Georgia Foundation for Independent Colleges* website and

followed the links to corresponding degrees and majors. An additional three schools were identified that

offer a coaching degree or minor (Covenant College, LaGrange College, and Toccoa Falls College).

Again, undergraduate programs were selected to assess the curricula of the entry level coaching

professional.

In total, five athletic training education undergraduate programs (Georgia College and State

University, North Georgia College and State University, Valdosta State University, The University of

Georgia, and Georgia Southern University) and four coaching undergraduate programs (North Georgia

College and State University, LaGrange College, Toccoa Falls College, and Covenant College) in the

state of Georgia were reviewed for curriculum content. Course descriptions and syllabi were accessed

through institution program links, course catalogs, or faculty web pages in an attempt to determine if body

image or eating disorder education is included in the curriculum. Program coordinators were contacted in

an attempt to determine if and to what extent body image and eating disorder issues are addressed in the

curriculum and to explore how programs teach this information.

Coaching Curricula

From the four coaching curricula reviewed, all of the programs had at least one required course in

which general concepts such as nutrition or psychological concepts applied to human performance in

sport was documented. The courses were identified either from personal communication with faculty or

catalog course descriptions (see Appendix C). These courses included Personal Health and Fitness,

Sociology and Psychology of Sport, Principles of Strength Conditioning and Nutrition for Athletes, and

Life Fitness.

Traditionally, courses on nutrition provide an outlet where eating disorders can be discussed in

relation to a balanced caloric intake. All of the courses except for the Sociology and Psychology of Sport

course included nutritional techniques or principles. In most courses this was approached as a connection

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to sports performance. For example, program faculty at North Georgia College and State University said the Personal Health and Fitness class has a chapter devoted to eating disorders. Lecture and discussion is used as the primary method of teaching this material. Environments that emphasize leanness, muscularity, and/or body shape that may damage athletes' *body image* and self-concept can be a topic for discussion in sport psychology courses. The Sociology and Psychology of Sport course listed the psychological and sociological concepts applied to human performance in exercise and sport as focus of interest but did not specifically address eating disorders.

Though all four of the coaching programs that were reviewed have a course in which eating disorder and body image issues may be addressed, it is unclear as to what extent these issues are discussed within a course. Nutrition seemed to be the most likely course component in which such issues could be addressed; however it is just one component of the curriculum as a whole, therefore the amount of time attributed to such issues is limited. Thus, the topic of body image and eating disorders seems relevant to courses in each of the four coaching programs that were reviewed but the extent to which this topic is truly addressed appears to be minimal.

Athletic Training Curricula

All five accredited athletic training programs had at least one or more courses in which eating disorder or body image issues were addressed. All programs in Athletic Training also require students to complete clinical proficiencies for nutrition and intervention as well as referral for eating disorders. Though the courses are positioned at different times within the curriculum depending on the institution, all schools address this proficiency. Courses were identified from personal communication with faculty from three of the institutions (Georgia College and State University, The University of Georgia, and Georgia Southern University) while additional courses were identified through catalog course descriptions or course syllabi (see Appendix C). Relevant courses offered within athletic training curricula included Nutrition, General Medical Conditions, Health and Wellness for Life, Sport Related Illnesses and Conditions, Athletic Training Ethics and Psychosocial Issues, Prevention of Injury and

Illness, Senior Seminar, and Clinical/Practicum in Athletic Training. Courses were required for degree completion.

In addition to the practicum courses, courses on Nutrition and General Medical Conditions/Sport Related Illnesses were found to be the most common courses addressing eating disorder and body image components. The General Medical Conditions course was listed as the first course in which the information is introduced at the University of Georgia. At Georgia College and State University the text for the Nutrition class includes four chapters related to this material providing a basic overview of nutrition, bodyweight and composition, weight loss, and weight gain. Nutrition is also a required class at The University of Georgia and Georgia Southern University with program faculty at each of the two institutions listing lecture and discussion as the primary presentation method.

Additional observations from the curriculum review included the use of an eating disorder video as a method of presentation in the Healthful Living class at Georgia Southern University. Though this course was cited as including eating disorder topics, program faculty noted that "the material is only covered in a single unit and not very in depth." At the University of Georgia students complete a worksheet relating to the clinical proficiency in the practicum course. In email correspondence, program faculty at Georgia College and State University also "feel that this is an important clinical issue that should be addressed in our courses."

Similar to the coaching curriculum scan, this scan of the curricula in athletic training programs shows that all programs have one or more courses in which eating disorder and body image issues may be addressed though these topics appear more salient in athletic training that in coaching programs. Though more prominent in the curricula, it is unclear to what extent these issues are discussed within those courses beyond the coverage of a single chapter or unit. Nutrition and General Medical Condition courses appeared to represent the greatest didactic component in which these issues could be addressed, whereas the clinical courses provided for a more hands on experiential learning component with the clinical proficiency requirement.

Curriculum Summary

In reflecting on the first research question, *What policies and educational components are present in the training of professionals (high school athletic trainers and coaches) with regard to the identification and management of body image and eating disorders?*, professional preparation programs in both professions include courses in which these issues are presented and/or assessed though it is unclear as to what extent these issues are discussed within a course beyond the coverage of a single chapter or unit. Nutrition seems to be the most common course found across both professions addressing these issues with lecture and discussion as the primary method of teaching this material as well as the use of video in some instances. Program faculty addressed a need for the inclusion of such material; however with pressures to meet accreditation standards, information on this topic can only be allotted so much time.

There also seemed to be a difference between athletic training and coaching curricula with regard to the quantity of body image and eating disorder information presented throughout a program. Fewer courses seem to address these topics in coaching preparation programs whereas in athletic training programs more courses seem to reiterate these issues, conceivably placing a greater importance on these issues. In addition, the clinical proficiencies associated with athletic training practicum/clinical courses acknowledge the recognition, referral, and management of these issues on a broader scale.

Though there is the inclusion of body image and eating disorder topics in the curriculum, it is important to consider that not every professional, specifically coaching professionals, has graduated from a program within the same content area. Therefore it becomes necessary to consider the perspectives of professionals who actually work with female athletes in the field to gain a better real world understanding of these issues.

Chapter 5: Professional's Survey Results

Previous studies have indicated that collegiate professionals initiate body image concerns in female athletes or feel unprepared to handle issues in areas surrounding body image and eating disorders with female athletes. In this study I wanted to determine if this is also true of coaches and athletic trainers in the high school arena. Essentially I was interested in the experiences, beliefs, knowledge, and attitudes of these professionals in issues of body image and eating disorders. I also hoped to see if differences existed between coaching and athletic training professionals at the high school level.

I surveyed certified high school athletic trainers and high-school coaches in Georgia who work with high-school aged female participants within the realm of physical activity to assess their understanding of and experience with eating disorders and body image. By visiting each school's website I searched the staff directory to determine the availability of a coach or athletic trainer who worked with a female athletic team, names of these individuals, and the respective email addresses. An online link to a questionnaire on Survey Monkey was provided in an email to all professionals for whom I was able to obtain an email address. The questionnaire included questions related to demographics, eating disorder and body image perspectives of the professionals, and experiences with these issues. Open ended questions were also included for qualitative responses. All questionnaire items were coded and entered into the SPSS/PAWS statistical analysis software program. Themes were derived from the open-ended questions focusing on experience and beliefs data was coded and analyzed separate from the statistical data professionals provided.

Sample Description

Any individual, male or female, within a high school who coaches a female-centered activity or sport was included in the sample. In addition, all athletic trainers who work in high schools were also included in view of the fact that they cover both male and female sports at their schools. In total 1613

email addresses were found for high school coaches and athletic training professionals within the state of Georgia. This included public schools in the Georgia High School Athletic Association and private schools within the Georgia Independent Schools Association. An email was sent to these 1613 addresses. Approximately 403 (25%) of the emails were returned due to invalid email addresses, leaving 1211 delivered electronically to professionals. It is impossible to determine the percent of all potential coaches and athletic trainers included in the sample.

In total, 204 (17%) professionals responded to the survey. Of the respondents, 180 professionals were coaches and only 17 were athletic trainers. Three respondents were both a coach and an athletic trainer while the last four professionals were neither a coach nor an athletic trainer. These four professionals were excluded in analysis. Therefore the information from the survey provides a greater representation of coaching professionals than it does athletic trainers, specifically not allowing for adequate generalization to other athletic training professionals. However, these numbers do align with the averages of high schools in Georgia; seven coaches of female sports to one (if any) athletic trainers employed by the school (Georgia Athletic Trainer's Association, 2010).

Demographic information was analyzed using frequencies to determine the background of the respondents regarding current position at the school, years of experience at the school and in the field as a whole, gender, level of education, sports in which they have worked with female athletes, and specific degree held. Within the population surveyed, 135 respondents (66.5%) were female while only 68 were male (33.5%). With regard to professional work experience 85 respondents (42.1%) had at least ten or more years in their respective fields while the next largest year range for experience was four to seven years, with 60 respondents (29.7%) reporting this category. The experience at the current school fell within the one to seven year range with 75 respondents (38.9%) working at the current school four to seven years and 70 (36.3%) working one-three years (Table 1). This data parallels the collegiate studies previously discussed except for the higher response rate for females rather than males in this study. This

may be attributed to the fact that at higher competition levels in college men offset female professionals in coaching positions.

Table 1. Years of Coaching or Athletic Training Experience

	Experience at Current School	Overall Experience
10 plus years	32 (16.6%)	85 (42.1%)
8-10 Years	16 (8.3%)	23 (11.4%)
4-7 Years	75(38.9%)	60 (29.7%)
1-3 Years	70 (36.3%)	34 (16.8%)
Total n	193	202

Basketball, cross country, soccer, and track were the sports where most respondents worked with high school female athletes. Softball and volleyball were also highly represented sports. Field hockey, snow skiing, wrestling, and competition cheerleading were additional sports in which the respondents worked with female athletes.

Sixty two (30.5%) professionals had received a Bachelor's degree while 125 respondents held a Master's degree (61.6%) (See Table 2). Doctoral and high school degrees were also noted but these percentages were not as remarkable, with 15 respondents holding a doctoral degree (7.4%) and only one receiving a high school education (.5%).

Table 2. Highest Level of Education

	Number of Respondents
High School	1 (0.5%)
Associates Degree	0 (0%)
Bachelors Degree	62 (30.5%)
Masters Degree	125 (61.6%)
Doctoral Degree	15 (7.4%)
Total n	203

While the majority of respondents have had a college education, over half the respondents, 122 (59.8%), hold a degree in a non-related field to coaching or athletic training (Table 3). Only 82 respondents (40.2%) held a degree or minor in coaching, physical education, kinesiology, athletic training, or a similar field of study.

Table 3. Degree in Related Field of Study

	Number of Respondents
Yes	82 (40.2%)
No	122 (59.8%)
Total n	204

Respondents noted that their degrees were in coaching, health and physical education, exercise science, health promotion, sports medicine, and athletic training while science, psychology, business, and other non-related degrees were also present.

Quantitative Research Questions and Analyses

The following information presents analyses related to Research Question Two.

RQ2a: What experiences have professionals had working with high school-aged female athletes with eating disorders?

Participants were asked about their experiences with an eating disorder including if they had ever spoken with an athlete about an issue, had an athlete come to them with a disorder, or previously referred an athlete for a disorder. They were also asked if they had ever suspected an athlete to have a disorder but did nothing about it. In cases where respondents answered yes, open ended responses were captured and thematic qualitative analysis was performed in order to obtain greater insight into these experiences and is presented later.

Over half the respondents (58.7%) had never talked to a female about an eating disorder and only 36 (20.9%) respondents had ever referred an athlete to a specialist (see Table 4). In addition 34 professionals (19.9%) have suspected an issue but never talked to the athlete about it. Only 18 respondents (10.4%) have had an athlete come to them about a disorder and only 9 professionals (5.3%) knew of any female athletes they once worked with who had an eating disorder but at the time they were unaware. While these statistics appear insignificant, they provide evidence that these issues are at times not discussed or easily approached in high school athletics. Athletes appear to not openly go to their coaches and athletic trainers with these disorders and at the same time professionals might not be aware of or willing to discuss such issues.

Table 4. Professionals experience with Eating Disorders.

	Yes	No
Ever talked with a female athlete about an eating disorder	71 (41.3%)	101 (58.7%)
Athlete come to you on her own to talk about eating disorder	18 (10.4%)	155 (89.6%)
Suspected athlete had disorder but did nothing about it	34 (19.9%)	137 (80.1%)
Referred an athlete to a specialist for a disorder	36 (20.9%)	136 (79.1%)
Know of female athletes that had a disorder at time but were unaware (professional was unaware)	9 (5.3%)	161 (94.7%)

In addition to these statistics, respondents were also asked to estimate the number of female athletes they have previously worked who had an eating disorder. Guesses ranged from as few as zero

athletes to as high as 20, representing five to ten percent of prior female athletes. It is important to understand the beliefs and knowledge of professionals in the management of these disorders, which is discussed below.

RQ2b: What beliefs and knowledge do professionals possess in the identification and management of eating disorders in high school-aged female athletes?

Participants were asked to rank the seriousness of certain behaviors that an athlete might participate in on a four point Likert scale where one equals "not at all serious" to four equals "serious." Frequency percents and mean score averages were used to evaluate responses. Behaviors included eating fast food, binge eating, skipping meals, self-induced vomiting, laxative abuse, diuretic use, fasting, excessive exercise, and excessive weighing of one's self (see Table 5). These behaviors each linked to a specific type of eating disorder, pattern of disordered eating, or specific behavior used to void excess calories.   Ranked as the most serious behaviors among the respondents were self-induced vomiting (97.5% of respondents, average score 3.97), laxative abuse (93.3% of respondents, average score 3.92), diuretic pill abuse (85.0% of respondents, average score 3.84), binge eating (52.1% of respondents, average score 3.33), and fasting for an entire day (49.7% of respondents, average score 3.25). Eating fast food occasionally was ranked as the least serious (43.1% of respondents, average score 1.74).

Table 5. Seriousness of Eating Behaviors

	Not at all Serious (1)	Somewhat serious (2)	Serious (3)	Very Serious (4)	Mean Score
Self-induced vomiting	0 (0.0%)	1 (0.6%)	3 (1.8%)	159 (97.5%)	3.97
Laxative abuse	0 (0.0%)	2 (1.2%)	9 (5.5%)	152 (93.3%)	3.92
Diuretic abuse	0 (0.0%)	2 (1.3%)	22 (13.8%)	136 (85.0%)	3.84
Binge eating	2 (1.2%)	28 (17.2%)	48 (29.4%)	85 (52.1%)	3.33
Skipping 2 meals a day	0 (0.0%)	24 (14.7%)	63 (38.7%)	76 (46.6%)	3.32
Fasting for a day	9 (5.6%)	21 (13.0%)	51 (31.7%)	80 (49.7%)	3.25
Excessive exercise	4 (2.4%)	34 (20.7%)	74 (45.1%)	52 (31.7%)	3.06
Under eating	5 (3.1%)	36 (22.2%)	70 (43.2%)	51 (31.5%)	3.03
Weighing oneself multiple times a day	6 (3.6%)	51 (30.9%)	58 (35.2%)	50 (30.3%)	2.92
Eating fast food frequently	3 (1.8%)	51 (30.2%)	77 (45.6%)	38 (22.5%)	2.89
Skipping 1 meal a day	23 (13.9%)	81 (48.8%)	54 (32.5%)	8 (4.8%)	2.28
Eating fast food occasionally	72 (43.1%)	72 (43.1%)	18 (10.8%)	5 (3.0%)	1.74

*n ranged from 160 to 169

The bulimic behavior of self-induced vomiting was reported as the most serious of the behaviors listed according to these respondents. This finding is unique with regard to the fact that respondents were able to associate self-induced vomiting as a destructive behavior. Respondents did not however find under eating and excessive exercise, traditionally associated behaviors of anorexia nervosa and anorexia athletic, as serious with only 31.5% and 31.7% of the respondents respectively.

For all behaviors except those of laxative or diuretic abuse and self-induced vomiting, at least one respondent found the behavior to be not at all serious. This statistic is significant given that each of these behaviors can all contribute to disordered eating. When professionals find these behaviors not at all serious, it sets the stage for possible body image and eating disorder issues.

Participants were also asked to assess eight true/false statements regarding specific myths or facts about eating disorders. Statements included eating disorders being an illness, uncommon, and a choice. Statements about bulimia and anorexia were also included as well as statements about the recovery of these issues and appearance measures. These statements were based on common myths explained by the National Eating Disorders Association (http://www.edap.org/). All statements were false except for the final item stating, "Most people recover from an eating disorder." Majority of participants correctly responded to each statement as false, signifying that these statements are in fact myths. The two statements reading "Eating disorders are not an illness" and "An individual is not sick until they are emaciated" received the greatest number of correct responses. Specifically the statement, "An individual is not sick until they are emaciated," received the most correct responses with only one participant selecting this item as a fact. Statements reading "Most people recover from an eating disorder" and "Eating disorders are a choice" seemed to be the most inconclusive, receiving the closest to an even number of correct to incorrect responses signifying that respondents were unsure if these statements were myth or fact.

Table 6. Myths about body image and eating disorders.

	True	False
Eating disorders are not an illness.	2 (1.3%)	* 157 (98.7%)
Eating disorders are uncommon.	5 (3.2%)	* 149 (96.8%)
Eating disorders are a choice.	44 (28.6%)	* 110 (71.4%)
A person cannot die from bulimia.	4 (2.6%)	*150 (97.4%)
Anorexia nervosa is the only serious eating disorder.	9 (5.8%)	*145 (94.2%)
An individual is not sick until they are emaciated.	1 (0.6%)	* 153 (99.4%)
You can tell if a person has an eating disorder simply by appearance.	6 (3.8%)	* 152 (96.2%)
Most people recover from an eating disorder.	* 61 (37.7%)	101 (62.3%)

*signifies correct answer

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In conclusion, participants believe most of the eating disorder behaviors listed to be very serious except for that of occasional fast food consumption. Most of the participants were able to correctly identify the myths as false statements; however they had the greatest inconclusiveness with eating disorders being a choice and the ability of an individual to recover from an eating disorder. This is important when looking at professionals who work with female athletes. Professionals may not offer the same type of assistance to athletes who they feel choose the disorder. In addition, by not feeling athletes can recover from an eating disorder, it may change the way professionals view the athlete for the sport (i.e. not putting them in a key position) or impact referrals (not referring them if they can't recover). Therefore it is important to examine professional's perceived responsibility in managing these disorders.

RQ2c: What attitudes do professionals possess about their personal responsibility in the management of eating disorders in high school-aged female athletes?

Participants were asked to indicate the extent to which they agreed with seven statements concerning their role and responsibility in the identification and support of an eating disorder on a five point Likert scale from one equals "strongly disagree" to five equals "strongly agree." Frequency percents and mean score averages were used to evaluate responses (Table 7). Identification of these disorders, feeling comfortable talking to athletes about these issues, support, responsibility, and referral were the main points of focus. Half of the respondents strongly agreed that it was their responsibility to talk to an athlete about an eating disorder (50.0% of respondents, 4.38 average response) with none of the respondents strongly disagreeing with this statement and only four respondents somewhat disagreeing. This suggests that respondents do feel that there is some responsibility for professionals to talk to athletes with these issues. This again is comparable to the collegiate studies citing that athletic training professionals feel it is their role to identify athletes at risk. Respondents also felt strongly that disordered eating for a short period of time, like three months during active sports, is serious enough to require intervention from a counselor or nutritionist (48.5% of respondents strongly agreed, average response 4.31). Again, this suggests that respondents feel there should be outside professional assistance beyond

that in which coaches and athletic trainers can provide for female athletes with these issues. Only half of

the respondents (42.8%, average response 2.14) felt that they could effectively support a female without

outside assistance. Respondents also felt that they could identify eating disorder issues (54.6% of

respondents, average response 3.43) and were comfortable talking to female athletes about these issues

(40.9%, average response 3.81). These statistics indicate that professionals feel that these issues need

attention however may not be able to offer the support needed to these athletes.

Table 7. Personal Responsibility in the Management of Eating Disorders

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree	Average Rating
I can identify a female athlete with an eating disorder.	8 (4.9%)	25 (15.3%)	30 (18.4%)	89 (54.6%)	11 (6.7%)	3.43
I would be comfortable asking a female athlete if she has an eating disorder.	7 (4.4%)	23 (14.5%)	14 (8.8%)	65 (40.9%)	50 (31.4%)	3.81
If I talk to a female athlete about a possible eating disorder, it would increase the likelihood that she receives the help she needs.	2 (1.3%)	13 (8.3%)	29 (18.6%)	60 (38.5%)	52 (33.3%)	3.94
It is my responsibility to talk to female athletes I suspect of having an eating disorder.	0 (0.0%)	4 (2.5%)	12 (7.5%)	64 (40.0%)	80 (50.0%)	4.38
I can effectively support a female athlete with an eating disorder without outside assistance.	71 (42.8%)	46 (27.7%)	18 (10.8%)	16 (9.6%)	15 (9.0%)	2.14
If I refer a female athlete with an eating disorder to a doctor, counselor, or nutritionist, it will increase the likelihood that she is able to change those behaviors.	1 (0.6%)	7 (4.3%)	21 (13.0%)	70 (43.2%)	63 (38.9%)	4.15
Disordered eating for a short period of time, like three months during active sports, is serious enough to require intervention from a counselor or nutritionist.	1 (0.6%)	3 (1.8%)	20 (12.1%)	61 (37.0%)	80 (48.5%)	4.31

Though data indicated these issues were important, data also suggested areas of uncertainty and

areas in which respondents didn't feel strong personal responsibility. For example only 33% of

respondents strongly agreed that if they talked to an athlete about a disorder that it would increase the

likelihood that the athlete would receive help. In addition, just 38.9% of respondents felt strongly that if they referred an athlete then that girl would get the help she needed. These specific statistics have particular implications for athletes with disorders. Professionals may feel that talking to or referring an athlete will not help the athlete take the next step to recover from these issues, therefore making referrals is not an effective response. And specifically fewer than half of respondents felt that disordered eating is a problem as long as it is for the sport. Research has previously illustrated that this can lead to a continuous cycle of disordered eating patterns for athletes.

RQ2d: What differences exist between athletic training and coaching professionals regarding the identification and management of eating disorders?

Independent t-tests were performed to compare athletic training and coaching professionals and other demographic variables on several measures (identification, support, comfort, and responsibility); however due to an unequal sample size for comparison in general (Athletic Training n=17, and Coaching n=179) and a small sample size for the athletic training professionals, there was no significant difference in any of the measures.

Given that the two groups did not differ significantly on their measures, I chose to examine further the relationship between gender, education, and years in the profession with the overall responsibility of professionals. Gender was chosen since I was specifically looking at professionals working with female athletes. I wanted to see if gender had an impact on any of the measures. In addition, education and years in the profession were selected to examine if they influenced the measures.

A chi-square test of independence was performed to examine the relation between gender and the responsibility of professionals to talk to female athletes about these disorders (Table 8). The relationship between these variables was not significant, $[X2 (3, N = 160) = 6.18, p = .103]$. Female professionals were no more likely to feel a responsibility to talk to an athlete about an eating disorder than were males. However 58 (55.2%) females felt strongly about this responsibility whereas only 22 (40.0%) males felt the same.

Table 8. Gender and Responsibility

Responsibility			male	female	Total
			Gender		
	Disagree Somewhat	Count	3	1	4
		% Within Gender	(5.5%)	(1.0%)	(2.5%)
	Neutral	Count	6	6	12
		% Within Gender	(10.9%)	(5.7%)	(7.5%)
	Agree Somewhat	Count	24	40	64
		% Within Gender	(43.6%)	(38.1%)	(40.0%)
	Agree Strongly	Count	22	58	80
		% Within Gender	(40.0%)	(55.2%)	(50.0%)
Total		Count	55	105	160
		% Within Gender	(100%)	(100%)	(100%)

* $X2$ (3, N = 160) = 6.18, p =.103

Gender was also examined in relation to whether the respondent had personally experienced an eating

disorder previously. More females (N= 47, 41.2%) than males (N= 17, 29.3%) reported personally

experiencing an issue previously (Table 9). This was evaluated to determine if this impacted whether the

professional was more comfortable talking to athletes who have a disorder. This relationship was not

significant, [$X2$ (1, N = 172) = 2.34, p =.126].

Table 9. Gender and Previously had an Eating Disorder

Respondent has had an Eating Disorder			male	female	Total
			Gender		
	No	Count	41	67	108
		% Within Gender	(70.7%)	(58.8%)	(62.8%)
	Yes	Count	17	47	64
		% Within Gender	(29.3%)	(41.2%)	(37.2%)
Total		Count	58	114	172
		% Within Gender	(100%)	(100%)	(100%)

* $X2$ (1, N = 172) = 2.34, p =.126

Gender and whether the respondent had talked to an athlete with an eating disorder was also explored.

The relationship between these variables was not significant, [$X2$ (1, N = 172) = .000, p =.985]. Female

professionals had not talked to an athlete about an eating disorder more so than males. In fact the

percentages were almost equal, 24 (41.4%) males and 47 (41.2%) females (Table 10).

Table 10. Gender and Professional Talked to Athlete with Eating Disorder

			Gender		
Prof Talked to Female with ED			male	female	Total
	No	Count	34	67	101
		% Within Gender	(58.6%)	(58.8%)	(58.7%)
	Yes	Count	24	47	71
		% Within Gender	(41.4%)	(41.2%)	(41.3%)
Total		Count	58	114	172
		% Within Gender	(100%)	(100%)	(100%)

* $X2$ (1, $N = 172$) = .000, $p =.985$

The relationship between the ability to identify an eating disorder and if the professional held a

degree in a field related to coaching and athletic training was explored as well. The relationship between

these variables was not significant [$X2$ (4, $N = 163$) = 3.63, $p =.458$] (Table 11). A degree related to the

field of athletic training or coaching did not have a relationship with identifying an eating disorder. The

count was almost split evenly with respondents agreeing somewhat that they could identify an eating

disorder.

Table 11. Related Degree and Professional Talked to Athlete with Eating Disorder

Prof felt could ID and ED			No	Yes	Total
	Disagree Strongly	Count	7	1	8
		% Within R. Deg	(7.6%)	(1.4%)	(4.9%)
	Disagree Somewhat	Count	15	10	25
		% Within R. Deg	(16.3%)	(14.0%)	(15.3%)
	Neutral	Count	16	14	30
		% Within R. Deg	(17.3%)	(19.7%)	(18.4 %)
	Agree Somewhat	Count	48	41	89
		% Within R. Deg	(52.1%)	(57.7%)	(54.6%)
	Agree Strongly	Count	6	5	11
		% Within R. Deg	(6.5%)	(7.0 %)	(6.7%)
Total		Count	92	71	163
		% Within R. Deg	(100%)	(100%)	(100%)

* $X2$ (4, $N = 163$) =3.63, p =.458

In conjunction to the relationship between the ability to identify an eating disorder and related degrees, the relationship between education level and the ability to identify an eating disorder was explored. The relationship between these variables was not significant, [$X2$ (8, $N = 162$) = 6.16, p =630] (Table 12). The level of education did not have a relationship with identifying an eating disorder. Respondents mostly somewhat agreed that they could identify an eating disorder; Bachelor's degree 25 (54.3%), Master's degree 54 (52.4%), and Doctoral degree 10 (76.9%).

Table 12. Education and Ability to Identify Disorder

Prof felt could ID and ED			Bachelor	Master	Doctor	Total
	Disagree Strongly	Count	1	7	0	8
		% Within Edu	(2.2%)	(6.8%)	(0%)	(4.9%)
	Disagree Somewhat	Count	7	18	0	25
		% Within Edu	(15.2%)	(17.5%)	(0%)	(15.4%)
	Neutral	Count	9	18	2	29
		% Within Edu	(19.6%)	(17.5%)	(15.4%)	(17.9%)
	Agree Somewhat	Count	25	54	10	89
		% Within Edu	(54.3%)	(52.4%)	(76.9%)	(54.9%)
	Agree Strongly	Count	4	6	1	11
		% Within Edu	(6.7%)	(5.8%)	(7.7%)	(6.8%)
Total		Count	46	103	13	162
		% Within Edu	(100%)	(100%)	(100%)	(100%)

* $X2$ (8, $N = 162$) = 6.16, p =630

      When examining the relationship between comfort in talking with a female athlete with an eating disorder and years of experience in the field, the relationship was not significant, [$X2$ (12, $N = 157$) = 13.66, p =.323], though respondents with 10 plus years most strongly felt comfortable in talking with an athlete (Table 13). The relationship between gender and comfort in addressing an issue was significant, [$X2$ (4, $N = 159$) = 16.6, p =.002], indicating that females may feel more comfortable in addressing such issues more so than males (Table 14).

Table 13. Years of Experience and Comfort in talking to an Athlete

Comfort			Experience				
			1-3 Y	4-7 Y	8-10 Y	10 + Y	Total
	Disagree Strongly Count		1	1	1	4	7
	% Within Experience Total		(4.0%)	(2.1%)	(5.0%)	(6.2%)	(4.5%)
	Disagree Somewhat Count		2	7	4	10	23
	% Within Experience Total		(8.0%)	(14.9%)	(20%)	(15.4)	(14.6)
	Neutral Count		2	5	1	6	14
	% Within Experience Total		(8%)	(10.6%)	(5%)	(9.2%)	(8.9%)
	Agree Somewhat Count		16	16	11	21	64
	% Within Experience Total		(64%)	(34%)	(55%)	(32.3%)	(40.8%)
	Agree Strongly Count		4	18	3	24	49
	% Within Experience Total		(16%)	(38.3%)	(15%)	(36.9%)	(31.2%)
Total	Count		25	47	20	65	157
	% Within Experience Total		(100%)	(100%)	(100%)	(100%)	(100%)

* $X2$ (12, $N = 157$) = 13.66, $p = .323$

Table 14. Gender and Comfort in talking to an Athlete

Comfort			Gender		
			male	female	Total
	Disagree Strongly	Count	6	1	7
		% Within Gender	(11.3%)	(.9%)	(4.4%)
	Disagree Somewhat	Count	12	11	23
		% Within Gender	(22.6%)	(10.4%)	(14.5%)
	Neutral	Count	6	8	14
		% Within Gender	(11.3%)	(7.5%)	(8.6%)
	Agree Somewhat	Count	15	50	65
		% Within Gender	(28.3%)	(47.2%)	(40.9%)
	Agree Strongly	Count	14	36	50
		% Within Gender	(26.4%)	(34.0%)	(31.4%)
Total		Count	53	106	159
		% Within Gender	(100%)	(100%)	(100%)

* $X2$ (4, $N = 159$) = 16.6, $p = .002$

In conclusion, few of the relationships explored had statistical significance. Females more than

males appeared to have a greater comfort level in assisting female athletes with these disorders and also to

have previously had a disorder themselves. Due to a small sample size for the athletic training

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professionals, comparisons between athletic training and coaching professionals was not possible. Percentages show that females have a greater level of comfort in talking to female athletes about these disorders and feel a level of responsibility; however female professionals had not talked to an athlete about an eating disorder more so than males. Furthermore, level of education and years of experience in the field did not have a relationship with identifying an eating disorder.

Qualitative Analysis

A total of 141 total comments were made by respondents about experiences with athletes who skipped meals or suffered from eating disorders. Respondents commented on numerous body image issues in which they saw girls skipping meals or losing extreme amounts of weight in order to mold to idealistic standards of sport and of body image at the high school level. In addition to the experiences with body image and eating disorder issues, the respondents also complained about the girls' parents. Finally respondents also discussed how they have previously approached ways to address body image and eating disorder issues.

The comments shared by respondents were varied, however had one consistent theme of thinness throughout. For example one professional said,

> I had a freshmen athlete competing Varsity and she expressed a desire to have the same muscle tone as some of the senior athletes on the team despite the fact that developmentally, her body was four years behind theirs. She began skipping meals in an effort to get thin.

Another discussed,

> I am a track coach, and I teach a Body Sculpting course during the school day, so I have had many girls come through my programs who have problems with their body image. Some are more serious than others, and I have had to refer them to counseling. I'm dealing with one now whose Dad is ready to pull her from all activities (running and my class) if she does not start to prove she is eating.

No one sport or specific disorder surfaced in the respondents comments. However 1 out of every 4 respondents complained about the parental role when discussing female athletes with eating disorders and body image issues. For example, one professional spoke of the inattentiveness of the parents: "I alerted her parents and they were unconcerned unless her academics suffered, she ended up in a rehab center for a number of months." Another professional shared disgust in the lack of concern of parents,

> I spoke with an athlete who was exhibiting signs of bulimia, which she learned from her wrestler brother. I addressed it with her, and she did not feel it was a big deal to purge after meals. I ended up speaking with her mother, who said the same thing as the daughter. The issue was never resolved because her mom thought it was an okay behavior.

Cheerleading appeared to surface as the sport in which coaches had the most problems with unrealistic expectations from parents. When parents push for an idealistic body type for their female cheerleader daughters, coaches face a two sided battle because pressures are coming from home. For example, one participant stated,

> There was a group of girls who only wanted to eat 1/4 of a bagel for breakfast, no lunch, and then a small salad for dinner. They said they needed to keep their "cheerleader bodies" for when they were in uniform and also so that they could adhere to the wishes of their mothers who wanted them to be an "ideal size."

Another participant stated that the female athletes "couldn't seem to approach parents because they didn't see it and were defensive." Another professional discussed a cheerleading situation in which,

> The student/athlete was pressured by the parent about her size. She was a "flyer" on the cheerleading squad and she was pressured about her size to maintain her ability to be able to "fly" at a reasonable weight. Instead of speaking directly with her, I spoke with the mother about the seriousness of her pressure on the student to lose weight (she was at a great weight).

Finally, through the comments, respondents shared approaches to addressing eating disorder concerns in female athletes. Again parental involvement was included. For example, one professional said,

I talk to the parents and not the girls. I tell parents the specific things to watch for, get them support, more info and help them get the right next steps. Talking directly to the individual will lead to more issues and make the problem worse.

Referrals, when not using a school counselor, also seemed to place the parents at the center of assistance. For example one professional shared that in the referral there was "open conversation about the disorder and encouraged parental involvement and counseling referral." Another remarked, "I encouraged them to talk to their parents first so they are aware of the situation. I then encourage them to seek professional help with nutrition as well as physical and mental help." In total, parental involvement is seen as an important piece of the puzzle to the whole body image picture for coaches who work with female athletes. These professionals feel that parents can either be a piece of the problem or be a key factor in helping their daughters through such issues.

When parental involvement was not discussed as a component to assist female athletes in body image and eating disorder concerns, professionals seemed to approach matters from a sports performance perspective. They talked about how the damaging effects of poor nutrition and eating disorders can affect overall sports and academic performance. For example, one participant commented, "I have mentioned that it is very damaging to the body long term and that it reduces the performance and their ability in the classroom." Another discussed the importance of nutrition, "I addressed an entire group as a team and talked in length about nutrition and the values of calories for an athlete." Another professional described,

Three years ago, it came to the coaches' attention that some of the girls on the cross country team were overly concerned with their weight and eating habits. We sat down as a whole female team and discussed with a nutritionist the importance of eating healthily and having a good body image.

In summary, coaches and athletic trainers are in the position to recognize an array of body image and eating disorder issues with female athletes. These disorders are real and coaches and athletic trainers experience instances of these throughout the sports in which they work. Though no one sport was blamed for these disorders, cheerleading seemed to be the activity most commented on in which female athletes had an issue. Respondents also felt that a certain level of responsibility should be given to parents to talk to their daughters about a disorder.

Supportive Resources

To conclude the survey, respondents were asked to share what educational tools they feel would benefit them in talking and aiding female athletes with these disorders. The questionnaire included an open ended question asking about additional assistance, training, or education that would be helpful in identifying and managing female athletes with eating disorders.

Respondents seemed to desire resources that can provide education on the management of a body image or eating disorder issue. Specific attention was given to the identification of these disorders. Particularly respondents discussed the necessity of being able to identify these disorders through the identification of related signs and symptoms. For example, one respondent said "It would be helpful to know what I'm looking for." Many others respondents mentioned how most professionals need assistance in the signs of problems.

In conjunction with identifying these issues, respondents highlighted a need for information on how to facilitate discussions with confidence with female athletes surrounding body image and eating disorders. In addition, respondents also discussed the need for information on how to address these issues once identified, including to whom to refer the athlete. One participant commented on the topic of referrals, recommending professionals have a list of counselors or doctors in the area in which to refer an athlete.

Respondents also emphasized the need to discuss the information with parents. Therefore, having sources that provide information on how to talk with parents was identified as important. Many

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respondents wanted more information on how to approach the topic with parents and not just the athlete. Videos, flyers, pamphlets, brochures, and handouts were suggested as informational tools in which to disburse the information to parents. In fact one participant remarked on the importance of clinics or informational seminars for coaches as well as parents at the high school and middle school level.

Online resources also seemed to be a major topic that surfaced as well as other forms of electronic media such as videos. Respondents want resources that are easily accessible and available on demand. One participant suggested a "website with printable articles and a chat room to talk with an expert." Other respondents mentioned articles through the internet, online resources available 24 hours a day, and online training courses for the convenience of professionals. Respondents specifically discussed that these sources need to include the signs and symptoms of such disorders and how to best address eating disorder concerns. Resources detailing the nutritional needs of the female athlete were cited as significant informational tools in which professionals need access. Participants noted that these sources need to be up to date, offer links to outside help, and "not cheesy."

Having individuals (former team mates, nutritionists, counselors, professional speakers, etc.) come and speak about these issues or testimonials to a team was also listed as a suggestion for efforts to assist in discussing eating disorder issues. Georgia High School Association clinics as well as additional sessions woven into other required trainings such as CPR courses and individual sport clinics offering these topics were also listed as a recommendation.

Survey Summary

It is important to acknowledge that the data received is only a limited set, and is not representative of the larger set. The data set itself yielded a small sample size and also represented coaching professionals over those of athletic trainers. Furthermore, even the coaching sample was biased towards professionals with 10+ years of experience. Due to this response bias, considering primarily only experienced coaching professionals beliefs and knowledge yields an inaccurate picture of the knowledge and beliefs of the entire coaching and athletic training population. Therefore, these results provide a good

starting point for considering the beliefs and knowledge of high school professionals working with female athletes but cannot be generalized in order to not suggest an incorrect characterization of the population.

Additionally, more female coaches responded than males and more coaches than athletic training professionals. This is consistent with the small representation of athletic trainers across the state and is also consistent with information suggesting that females are more willing than males to share information about these topics since the survey went to coaches of female sports, we might anticipate many of the coaches were female. Gender did not however impact the perceived ability to manage these issues. The majority of the professionals responding had at least ten years of experience, most in non-aesthetic sports (i.e not competitive cheerleading). These demographics were important in understanding the population responding to the questionnaire.

Education level varied from a high school diploma to doctoral degrees. Education level did not however impact the attitude of the professionals in their ability to manage a disorder. Nor did having a degree in a field related to athletic training or coaching relate to the ability to identify an eating disorder. This suggests that perhaps it is not at the academic or discipline level in which training should be focused or that older curricula did not adequately prepare professionals. Furthermore professionals noted degrees in majors outside of the coaching or athletic training realm such as business, psychology, or science in which training in these issues would not be presented. Therefore it might be most beneficial to look at majors in which professionals are graduating rather than education level to determine what impact this has on the ability to manage a disorder.

Professionals felt that body image and eating disorder issues were serious but felt they could not support athletes in such matters, suggesting apprehension in both approaching and talking to a female athlete with an eating disorder and finding the support that athlete needs. Furthermore most respondents reported that they had never had an athlete come to them about an eating disorder. Thus, these issues are not highly discussed or easily approached in high school athletics. These findings contrast collegiate studies, where an overwhelming majority of athletic trainers' had dealt with an athlete with an eating

disorder. Furthermore, the collegiate studies of athletic trainer's had over half of the respondents reporting that they could offer support.

Most of the participants were able to identify the myths as false statements. This determination is important when looking at professionals who work with female athletes. If professionals believe the athlete exercises some choice in the disorder, the professional may not offer the same type of assistance to an athlete. In addition, by not feeling female athletes can recover from an eating disorder, professionals may change the way they view the athlete for the sport (e.g. not putting them in a key position) or making referrals (why refer if they can't recover). With regard to the seriousness of eating disorder behaviors, at least one professional found the behavior to be not at all serious. This has important implications in that each of these behaviors can contribute to disordered eating.

Finally professionals provided recommendations for future training, education, and information to assist coaches and athletic trainers in areas of body image and eating disorders with female athletes. Recommendations included online sources, coaching clinics, videos, and informative speakers. Specifically identification of the disorders and how to manage such issues were documented as topics needed to assist professionals in these efforts.

Chapter 6: High School Athlete Focus Group Results

This chapter addresses the stories and experiences former high school female athletes shared in focus group discussions about their high school athletic experiences. The focus groups allowed for discussion and reflection about body image and eating disorders the participants experienced or witnessed while they were high school athletes. Essentially, I was interested in hearing accounts of experiences with body image and eating disorder issues, specifically those connected to high school coaches and athletic trainers'. I hoped these reflections would help answer Research Question 3, *What are the needs of high school-aged female athletes relating to body image issues and eating disorders during their experience in high school athletics?*

The focus groups were conducted with 19 total participants. The first focus group at Georgia College and State University included four participants lasting an hour while the second group included ten lasting close to two hours. Five participants were involved in the group at the University of Georgia. This session lasted for an hour and a half. Participants came from high schools distributed throughout the state as well as various types of school settings. Each discussion followed the same thematic structure, but often times participants in the different groups shifted the emphasis to different issues. A seven question interview guide was used to shape each session and the discussions were digitally recorded. The guide focused on aspects of the social context in which the athletes have had experiences with professionals pertaining to elements of body image. The questions were posed as follows:

1. What do you think of when you hear about body image or eating disorders?

2. Do you feel there is a connection between body image and eating disorders and sports?

3. Were body image or eating disorders a problem for anyone on your high school teams?

4. Do you think the athletic trainer or coach knew that some girls had body image or eating disorders on your team?

5. Do you think trainers/coaches who work with high school girls know enough about body image or eating disorders?

6. What advice would you give to high school coaches and athletic trainers who work with the girls' teams?

7. Is there anything we should have talked about, but didn't?

For purposes of this study, a transcript-based analysis was used with supplemental field notes that I completed as the moderator. I transcribed and numbered each line of the transcript. I then used the long table approach to data analysis suggested by Morgan, Krueger, and King (1998). I began by gathering two copies of each transcripts. During this process one copy was cut up while the other stayed intact. The transcript from each particular focus group was on different colored paper so I could easily tell the groups apart. I read through each transcript prior to the analysis, making note of any ideas, themes, or word choices. To begin the long table analysis I identified interview questions at the top of flip chart paper and placed these on the wall. I then began cutting and pasting passages from the transcripts of each focus group and placed them on pages from the flip chart so that all relevant quotes were assembled together for each of the seven interview questions. After assembling the data in this fashion, I looked over the passages that were relevant to each question and begin to consider categories/themes within each page. To identify themes I read each transcript selection and circled relevant ideas or words. After this was complete I wrote these ideas or words at the bottom of the page to capture a descriptive summary from each page. I then narrowed down the summarized lists into selective points of consideration. I wrote these summary points below the descriptive list. This process produced seven bulleted lists (one for each interview question). See Appendix K for an example page illustrating this process. Finally, I arranged these points into themes/categories that helped me address the research questions being asked.

From a research perspective, the approach aimed to encourage participants to reflect on their former high school experiences with athletics and to consider body image within the realm of the athletic environment. Participants were able to reflect on these experiences and share insights and understandings based upon what they saw among their teammates. Furthermore participants openly shared their personal

experiences with body image and eating disorder issues. Perhaps I was most surprised by this openness. In all sessions, participants after the first 15 minutes or so would interject or bring up in conversation if they had previously experienced an eating disorder or body image issue. The first GCSU focus group included one participant with a previous eating disorder, the second GCSU group contained four participants with a previous disorder or issue, and the UGA group included four participants with current or previous disorders.

Some of the ways in which interest in the focus group was framed were even more surprising, and would not have been likely to emerge in a questionnaire survey. For example, it turned out that many of the participants, particularly those participating in the UGA session anticipated the focus group session to be a time of therapeutic discussion and disclosure. Other participants fell to the opposite end of the continuum, explicitly stating how they had not previously experienced an eating disorder but knew of others in high school athletics who had. In these instances participants almost overly acknowledged the fact that they had not previously experienced a disorder. In each session participants seemed genuinely interested in hearing and sharing experiences with each other even if they had not personally experienced a disorder. Perhaps I found it most interesting to witness how clear the girls were able to vividly describe and explain previous high school experiences even though they had not participated in this setting for at least two years. Participants were able to clearly reflect on and describe comments, events, and situations in which these issues arose.

As a novice researcher I found it difficult to keep the participants discussion narrowed to the focus of my research. Each participant had a wealth of experiences to share and I did not want to minimize or disregard each story as important. I also found that as the interviewer, the participants looked to me as the expert and often asked questions in almost a therapeutic sense. This was especially true for the UGA session in which one participant disclosed an eating disorder for the first time ever and other group members discussed experiences in a way that gave the session a "counseling" tone.

In addition to these unique dynamics, as part of the recruitment efforts for these sessions I offered to provide snacks. For the first GCSU session in the morning I served pastries and fruit. The second GCSU session was conducted at lunch, therefore I provided the participants with the option of cheese and deli meats, chicken fingers, fruit, and brownies. The UGA session was scheduled for mid-afternoon thus I again provided participants fruit, cookies, and cheese and crackers. What I found interesting in each session was the lack of interest in food. The lunch session being the most highly attended group took the greatest interest in the food, but even then over half the food remained at the end of the session. Focus group participants during the morning GCSU session primarily only drank juice and participants in the UGA session, the one that I considered therapeutic did not touch the food. This lack of interest provides unique questions into the connection of food and discussions surrounding body image and eating disorders.

Athlete Experiences

Several themes emerged from the discussions in which participants shared their varied experiences from high school athletics. These themes with supporting commentary are offered to answer the first research question, *What experiences have former high-school female athletes had with body image and eating disorder issues?*

Syndrome of Secrecy

For the former high school athletes, beliefs surrounding the negativity of body image and eating disorders often led to instances of lack of attention to these issues and secrecy in the athletic environment. For example one participant commented, "The biggest problem to me is that people do not want to talk about eating disorders." A former basketball player discussed the lack of attention noting,

> I just think it boils down to people just need to be more open about it. I played basketball for eight years of my life, and no one ever spoke about it. And it was probably on every single team that you played on; no one knew about it, no one confronted anyone about it, no one ever talks about it, it's so under the table kind of thing.

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Another participant commented it was "taboo to talk about eating disorders." Another remarked, "It was like very underlying; nobody talked about that kind of stuff and somebody might did have it but you would have never known because nobody says anything about it." A cross country runner also said,

> I mean, I've been on teams where there are girls we know have an eating disorder, but we just don't talk about it, especially like cross country because you spend like an hour and a half with the same girls running, so you talk about everything in your life, and we won't talk about eating disorders or how we are not eating.

With the lack of openness described, and thus a lack of awareness to athletes who have these issues, body image and eating disorder issues are free to catapult into one big cycle.

Realness of the Issues

Though athletes may not always openly discuss such issues, situations that surround body image and eating disorders in the athletic environment are real. The following selections present experiences that participants shared about their high school athletic experiences in relation to body image and eating disorders. One such experience is described by a former cross country runner:

> One girl will start losing weight and move up positions, so if somebody beats you, you are like how did that happen? And you will do the same, lose weight and try to move up positions, it's all one big cycle.

Another participant shared how her disorder started with soccer at age ten.

> I played club soccer, I started when I was eight or nine and you split off into teams. There are different divisions, ABCDE and it goes all the way to G. I was on the A team one year and got put down to the B team, so I was one division below. At that age you just think about smaller because everyone is different sizes, so I was trying to be smaller and as athletic and as good as other people.

Another former soccer athlete disclosed how the sporting environment impacted other aspects of her life.

> I made myself throw up a few times. It wasn't just about the eating and the weight but it was

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also I wanted to be good enough in sports, because if I was good enough on the soccer team then

the guys soccer team would pay attention to me and I would fit into this crowd.

In addition, another situation was discussed by a former softball athlete. The former player described

how she had a team mate who was a year older who would eat small portions at lunch and then throw it

up. She added that, "Our coach never said anything about it though it was obvious enough that we had to

take her out of softball and her parents had to take her out of school."

Cheerleading also seemed to be a consistent sport in which the participants shared experiences

surrounding body image and eating disorders. One former cheerleader revealed when she began training

for cheerleading she immediately began to lose weight and everyone commented on how good she

looked. This triggered her to work out even more. She stated,

I got down to 92 pounds and everyone was like you are going to be a flyer, look how pretty you

are, everyone kept saying it and I kept wanting to lose more weight. Then my principal called me

into the office and wanted to know if I had a problem and through the discussion I decided not to

cheer my Junior year. When I was bad I would work out close to eight hours and then would be

so tired I wouldn't want to do stuff on the weekends.

This same participant discussed how her best friend in high school was also a cheerleader and "when they

would do the whole weighing in thing she would go on these crash diets when she found out her weight."

Another former cheerleader participant commented about her coach. She said,

I remember my freshman year in high school I was a cheerleader and I was on the JV team. My

coach said something to me, she was talking about all of the Varsity having eating disorders.

Like she was being such a bitch about it, she was laughing it off.

Another cheerleader described her experience with the coach as more positive. In this case the participant

stated,

When the problem [an eating disorder] came up the coach said 'no she's fine,' I have seen her eat,

she's just working out a lot. She would talk to me separately not to embarrass me and when I

thought no one was on my side, she would be on my side. She would be like you don't have to

work out so much, you need to gain some weight, you don't have to be skinny. It's more

important to be healthy and happy.

As revealed by the experiences discussed, we see that each situation was unique for each athlete, some

negative and some positive, and there was no simple quick fix or easy solution in any single case. Just as

the realness of instances of situations involving eating disorders and body image emerged from the

discussions, so too did the complexity of these issues for the athletes and professionals involved.

Image as a Complexity of the Sporting Environment

One of the complexities participants shared concerned the maintenance of an image for the sport.

For example, one former competitive cheerleader stated, "You know you think of the stereotypical

cheerleader… skinny, little, Barbie whatever, and people want to be that, at least I wanted to." Another

cross country runner suggested, "When you are doing a sport you have to bring out the image and

maintain that image, so it gets hard." Uniforms were also discussed as a facet of the sport stereotype.

Specifically participants commented on the small uniforms in cheerleading, cross country, basketball, and

volleyball and how this in turn can play a role into body image and eating disorders. One former

cheerleader commented,

Cheerleading causes a lot of problems because you are always in skimpy clothes. I remember I

wouldn't eat lunch and I don't feel like I was an unhealthy weight or anything. I guess it was

because I knew I was going to have to be in front of a lot of people in a tiny little outfit.

Another cheerleader talked about the "little uniforms and that you have to look good because they showed

our stomachs." One participant even noted that it starts as young as middle school.

In middle school there are inappropriate clothes. Like I cheered in high school and middle school

and middle school girls would wear shorts that their bottoms would hang out of, it was absolutely

disgusting and then also the tight tank top with their stomach showing.

Another former cross country participant made the comparison to cheerleading; "The clothing is like less than cheerleaders with small sports bras and tight shorts and so our uniforms were ridiculous." And a former volleyball athlete commented on the sport's "skimpy shorts."

Adding to the difficulty of image and the sporting environment, participants discussed how a specific image requirement may change numerous times within an academic year. Often high school female athletes will go from one seasonal sport such as tennis to the next season's sport such as softball, constantly dealing with a shift in the desired body type and a new uniform standard. For example one participant noted,

> A lot of people who run cross country also play soccer, and soccer conflicts more because it is completely different things you should be doing, because in cross country you want to be as light as you can but in soccer you want to gain as much muscle as you can. It's difficult that way.

In addition to the shift from one sport to another, participants described how image expectations may change from what is required for the sport to what is expected for society. One of the participants, though never suffering from an eating disorder, described these conflicting messages.

> In none of my sports I needed to be small. Softball you don't have to be small, and in basketball I was always the center or forward so I was trying to be one of the bigger taller people, like always trying to get stronger, and in throwing you needed to be bigger, but outside sports I always felt like I am good for my sports, but I don't look like anybody else.

She also went on to add that she had "thoughts in my head and stuff body image wise, but I never really took action to any of it."

Such image expectations often led to unhealthy comparisons made between others on the team and at those at different levels of competition such as Varsity, Junior Varsity, and C-Teams. For example one participant stated,

I don't know if you know what guys that run cross country look like but, they look like they've

been in a concentration camp and so it's really bad when you have a whole group of girls and the

guys are way skinnier than the girls.

Comparisons were also made between girls as well. For example, one participant remarked that "she was

so overweight compared to the other girls." Another comment was based on physical development;

"Some girls are developed and the girls who are notice the girls who aren't and the girls who aren't notice

those who are, and they are going to make comments." Another participant commented; "I would change

in the bathroom sometimes so I wouldn't, like I was one of those people that had no boobs, I didn't want

anyone around me, even like changing uniforms."

The locker room scene may also have exacerbated these comparisons. The locker room is

constantly filled with other girls who are also changing at the same time. One participant discussed how

you are "changing and walking around almost naked, and girls are looking at you." Another participant

described how,

Whenever the varsity would go through that door, we'd [junior varsity] constantly put our clothes

over us because we were younger and they were more in shape. We were concerned and be like

'I have a pudge, or I don't have nice abs.'

Professionals' Influence

When participants shared their previous experiences, the influence of the professionals working

with female athletes was clearly evident. These next selections offer insight into the second research

question, *How did professionals (coaches and athletic trainers) at the high school influence these*

experiences?

Participants discussed how coaching professionals coach to the standards of judges. Sports in

which an athlete is judged places additional pressures from coaches to meet specific criteria in which the

judges will critique, image being one in many instances. For example, one participant mentioned

equestrian riders having to look a certain way for the judges. She noted,

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One of my friends, she is already skinny, like she is toned and built, and some of those judges, they look at your weight and if you are an overweight equestrian rider your score is going to be a heck of a lot lower, and so their coaches are constantly drilling into their heads, 'if you are not a certain weight the judges are going to judge you lower and the whole equestrian team.'

She further added that "for the coaches it falls back on them, like if a girl is three pounds overweight or if she carries her weight in her face, then the judges look at that, and it shouldn't be like that because they are going to try to lose all the weight knowing they will get judged."

Participants described this "pleasing the coach mentality." For example, one participant described how athletes "ultimately want to please the coach and coaches have an ideal perspective of what they want to be, like number one in the state or the country." Particularly one participant mentioned that "in any sport I did I wanted to make my coach proud of me and it made me feel better so I would go out and do what I needed to do." Often these expectations are manifested in the form of image issues in athletes aiming to please.

Dance and cheerleading were not excluded. Weight guidelines as a component of image seemed to be the driving force for these sports. One former dancer discussed how "the team coach was really strict and would actually weigh the dance team members…. I just thought that was wrong, I mean it's good to be healthy, but I don't think weight should have been an issue." A former cheerleader stated that "the flyers would have to weigh in, they would have to be a certain weight limit, and I mean stuff like that, you wouldn't think a girl needs to weigh in just to be a flyer and so it was the little things."

Coaches contributed to the comparisons that the athletes made among each other as well. One participant remarked,

We had girls come in freshman and sophomore year that our coach compared to the Seniors, stating how 'the younger girls were so small, and that she needed the upperclassmen to be like this,' that caused a lot of issues for us, because you know when we came into high school we hadn't hit puberty, but I had already hit puberty and I knew I wasn't going to look like these girls.

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By experiencing these influences first hand, the participants were able to share recommendations for professionals working with female athletes in the future.

<p style="text-align:center;">**Recommendations for Professionals**</p>

Since the participants felt that the influence of professionals was so great on female athletes, they shared their thoughts on the training and qualifications of these professionals as recommendations for working with female athletes. This coincides with the third research question, *What recommendations would former high-school female athletes offer to professionals working at this level?*

Within the discussions, participants highlighted level of training, coaching qualifications, and relationship to the athletes as areas of concern for professionals based on their previous experiences. For example, participants commented that coaches were unclear on how to best manage body image and eating disorder issues. One participant, referring to her coach, said eating disorders were a true concern but "he didn't know how to handle it. He didn't know who to talk to, who to go to. He just wasn't educated enough." Another participant remarked that she didn't "think high school coaches are trained as well" and that she thinks a lot of it "is them not having the knowledge to back it up about eating, not just about eating disorders but they don't have the knowledge of how the body works, nutrition, or fitness." Another participant added that "just because they were good in sports doesn't necessarily qualify them to be a good coach." Others also said that coaches may not think it will happen to their girls. For example, "I think they know what it can do, but I don't think they think it will happen to their group of girls. They know about it, but they just don't think."

As a solution to these issues participants recommended that coaches should be more educated and talk more about the issues as a whole. One participant suggested, "Coaches should come together and not be scared to talk about it with their network." She also recommended that "administrative higher ups need to require that coaches have the training." Another participant stated that the coaches need to "acknowledge it and be more active with it." Another said that "coaches shouldn't be afraid to approach a girl with a disorder, I mean they need to know the information, and they need a way that if they suspect

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an eating disorder to not be confrontational and in their face." One participant also mentioned that coaches need "understanding of the symptoms and knowing all the tricks and stuff."

Participants also discussed how often times at larger public schools coaches are not employed by the school but are from the community just trying to help out; therefore they may not have the qualifications needed to coach at the high school level. In addition to the community coaches, many high school coaches are forced to coach one sport in order to coach another sport more relevant to their interests. A former cross country runner commented, "They didn't want to be there, but there was no one else; and especially if they are just there to do that, they aren't going to be like, oh- do you have an eating disorder?"

Another participant discussed age as a factor contributing to the lack of acknowledging such issues. She stated, "I feel like they [coaches] are also not a teenager anymore so they don't know what it feels like. My coaches certainly were not, they didn't help me… I can't say coaches know what they are talking about."

Participants suggested that knowing the female athletes on a personal level might be a resolution to these situations. One participant suggested, "I'd say actually listen to your girls, they just need to listen to their girls instead of just pushing them to do what they want them to." Another commented that "nurturing your players is really viable at the high school age because you are so vulnerable to adult consent." One participant also suggested that coaches should work out and participate with the girls in practice. For example, she said "our soccer coach was always out there running and sweating just like the girls, and it's that interaction and that's where you get to know your players more and get in their business and they will confide in you more." She went on to add, "I think it is extremely important to have that tough love like a parent if you are a coach." A former cheerleader suggested, "Really getting to know each girl on a personal level to where you can assess their situation in the appropriate manner instead of standing up in front of the team" and to work "one on one with an athlete."

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Participants also recommended that the coach be more approachable. "I think coaches need to be approachable, because I know one of our coaches was not that way" stated one participant. The physical weight of the coach impacted whether the girls feel that coaches were approachable and respected enough to listen and talk to. For example, one participant stated, "You aren't going to listen to an overweight cheerleading coach."

Finally, participants also suggested that coaches "educate us about healthy eating rather than just pinpointing out those who need to lose weight." Another former athlete noted that "coaches can come together with their team as a whole and talk to their teams about it and create a network." Participants specifically discussed the importance of this network and how the problem is not just contained within the sporting environment.

Therefore, to bring the discussions full circle, participants proposed that a combined team approach best addresses the needs of female athletes at the high school level, and that no one entity, coaches, administrators, parents, etc., can be the sole solution. These comments offer a team approach to research question three, *What are the needs of high school-aged female athletes relating to body image issues and eating disorders during their experience in high school athletics?*

Participants particularly discussed the responsibility of parents and schools as well and further noted the importance of these two entities in alleviating and aiding in prevention efforts for female athletes. For example, one participant remarked, "I think the schools have a responsibility with the cafeteria and stuff." Athletes who are struggling with issues may be more inclined to eat at least something small if a healthy option exists. Another participant also commented how, "Administrative higher ups need to require it [eating disorder and body image training for professionals working with athletes] and not be superficial and talk about the problems with our girls."

Participants also discussed the role parents play in exacerbating the issues. One participant said, "I think it has a lot to do with the parents, like how the parents perceive them." Another remarked, "Or parents who have the same body types as their daughters and then they gain weight and they are living

their life through their daughters and if their daughters start to put on weight it's as if they put on weight, and it's a never ending cycle." Lastly, one of the participants described how, "The parents need to have a conversation with the coaches as well because, like my Mom cooks very healthy so I never had to worry about what I was eating." Ultimately a combined team approach appeared as the best solution to addressing the needs and concerns of female athletes at this level.

Concluding Thoughts

In summary, the former high school female athletes were able to vividly reflect on high school athletic experiences and share their stories. Having the athletes reflect back on high school athletics rather than sharing a current experience was a limitation of the study; however I also found it to be a strength given that the athletes were able to provide rich descriptions of past events even though they had been removed from high school athletics for at least two years. This suggests that these occurrences make a lasting impact on the athletes. Furthermore, having the athletes reflect back allows for a more unambiguous description providing an "outside-in" look back at high school athletics.

Overall, participants shared that experiences surrounding body image and eating disorder issues do exist at the high school level. For the former high school athletes, beliefs surrounding the negativity of body image and eating disorders often led to instances of secrecy in the athletic environment while trying to maintain a specific image for the sport. Participants discussed how a specific image requirement may change numerous times within an academic year and described how image expectations increase by what is required for the sport to what is expected for society. The locker room appeared to be one source of struggle for athletes with these issues while the influence of professionals also emerged as a key stressor for female athletes with body image and eating disorders.

Overall the participants felt that coaches have a desire to help but do not have the knowledge or qualities to assist female athletes in these efforts. Furthermore, participants remarked how coaches are only a piece to a bigger solution that includes parents, schools, and administrators in taking a team approach to providing high school female athletes the supportive environment they need with regard to

body image and eating disorder issues. Recommendations were offered to professionals working with

these athletes in the future.

Chapter 7: Discussion

The purpose of this study was three fold. The first purpose was to determine what training these professionals received within the realm of body image and eating disorders that prepared them to work with female athletes.   The curriculum scan and review of accreditation standards addressed this purpose. A second purpose of the study was to determine if differences existed between high school coaches and athletic trainer's knowledge of eating disorders, experience with eating disorders, and beliefs surrounding the responsibility in the identification of these disorders, as compared to previous studies on collegiate professionals. The professional's survey provided insight for this question. And finally, as a third purpose of the study, the perspectives of collegiate females who have previously participated in high school athletics were assessed to offer a unique reflection on body image-related experiences in relation to high school coaches and athletic trainers. Focus groups provided rich data for this last purpose.

Research Question One

The first research question addressed the policies and educational components that are present in the training of professionals (high school athletic trainers and coaches) with regard to the identification and management of body image and eating disorders. Both professions have affiliated academic programs that prepare professionals to work with athletes. Accreditation standards control curricula in all academic institutions in Georgia offering a coaching or athletic training degree. These standards require each program to offer nutrition and weight maintenance information as an integrated component of the programs. Therefore students graduating from an institution in Georgia that offers a coaching or athletic training degree should be exposed to concepts and practice skills in the identification and management of eating disorders. Furthermore athletic training requirements afford students the opportunity to go beyond the cognitive identification of these issues and integrate the skills into clinical practice through the proficiency requirement. Though accreditation standards require these components as a part of the

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curriculum, academic institutions are allowed autonomy in the presentation and extent of these issues; therefore graduating professionals receive varied experiences in these issues.

Both professions include courses in which these issues are presented and/or assessed, however it is unclear to what extent these issues are discussed within a course beyond the coverage of a single chapter or unit. Faculty commentary confirmed that inconsistencies exist since individual instructors control the depth of the content and methods of teaching. A similar nutrition requirement is found across both professions with lecture and discussion as the two primary methods of teaching this information. Fewer courses seem to address these topics in coaching preparation programs whereas in athletic training programs more courses seem to reiterate these issues across the curriculum. This is in part due to more stringent accreditation standards such as the clinical proficiencies that are associated with athletic training practicum/clinical courses that emphasize the recognition, referral, and management of these issues on a broader scale.

The assumption can be made that students graduating from coaching and athletic training professions are receiving information surrounding body image and eating disorders; however there is a discrepancy between young professionals who may be receiving this information and the reality of experienced professionals who work with female athletes. As a limitation to my data, it was unclear as to how many years professionals have been working with female athletes compared to how many years ago the professional graduated. If professionals graduated ten or more years ago from a program, eating disorder and body image issues were unlikely or limited components in a coaching or athletic training program. Furthermore as the survey also indicated, many professionals who work with female athletes do not hold a degree in a related field or as the focus groups revealed, are community or volunteer coaches who also do not hold related degrees. For example, they may have a science or business degree and be coaching 16-year old female volleyball athletes. Hence, it almost becomes irrelevant to study coaching curriculum and to try to make generalizations to the coaching population given the variation in degrees of professionals in the field. In addition, though athletic training curricula may present a more in-depth look

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into such issues, fewer athletic trainers are employed by high schools than coaches so yet again there is a misrepresentation as to who is really working one-on-one with female athletes. In this case no matter how much information is taught regarding these issues in coaching and athletic training programs, many professionals who work with female athletes will not receive this training. This is the greatest problem in trying to target the educational institutions with regard to these issues; the wrong audience is being pursued.

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Research Question Two

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The second research question examined the knowledge, beliefs, and experiences of professionals working with high school-aged female athletes regarding the identification and management of issues surrounding eating disorders.

More female coaches responded to the survey than males and more coaching professionals than athletic training professionals. The majority of professionals responding held a Master's level education and had at least ten years of experience in their respective professions. Though female coaches holding a Master's degree made up the bulk of respondents, gender and education level did not appear to impact the perceived ability to manage these issues. This suggests that perhaps that training not be directed to a specific gender nor be more greatly focused in physical education and athletic training curricula. Females did however appear to have a greater comfort level in assisting female athletes with these disorders, perhaps because they were more likely to have had a disorder themselves, thus gender cannot be ignored. This compares to Lassiter and Watt's 2007 *study that* revealed that *female coaches* were more knowledgeable, had more appropriate attitudes, and were more likely to participate in prevention and intervention behaviors than male student *coaches*. These results imply the importance of gender in the coaching of female athletes in issues surrounding body image.

To add further insight to the influence of education, professionals noted degrees in majors outside of the coaching or athletic training realm such as business, psychology, or science in which training in these issues would not be presented; however there was no relationship between whether the

professional had degrees in fields related to coaching or athletic training and the ability to identify an eating disorder. This again suggests that training efforts not be strictly academically targeted and that related academic programs to the areas of coaching and athletic training did not prepare graduates in the area of body image and eating disorder more effectively than another discipline. In addition, with the greater number of respondents being at least ten years experienced, the academic training they received is not going to be the same as current graduating professions and thus training efforts aimed at current curricula would be a waste for these professionals. However interestingly, the experienced coaches felt more comfortable discussing body image and eating disorder issues with female athletes.

Given the amount of time these professionals spend with female athletes, coaches and athletic trainers are in the position to encounter an array of body image and eating disorder issues with female athletes. Respondents felt that these issues were serious but did not always feel that they could support athletes in such matters. This parallels Thompson, Yingling, Boardley, & Rocks (2007) study finding that most athletic training professionals report eating disorder pathologies to be a problem in the structured sport setting and that athletic trainers' need knowledge in the domains of disordered eating. Half of the respondents strongly agreed that it was their responsibility to talk to an athlete about an eating disorder while only 9% felt strongly that they could effectively support a female athlete with an eating disorder without outside assistance. The findings of the present study, though more specific to coaching professionals, are similar to those of Vaughan, King, and Cottrell (2004).

Vaughan, King, and Cotrell's (2004) study examining college athletic trainers' confidence in helping female athletes who have eating disorders as well as the 2003 National Collegiate Athletic Association (NCAA) Questionnaire for Collegiate Coaches of Female Student-Athletes (Sherman, Thompson, Dehass, & Wilfert, 2005) were drawn on for questions relating to knowledge and management of eating disorders. Current results parallel these studies in many ways. Demographically, professionals that responded to these surveys have at least ten or more years in the field and have worked at their current institutions for more than five years. Current results of coaching and athletic training

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professionals also suggest this, however most of the respondents in this study were female whereas in previous studies more male than female respondents were reported.

In addition, collegiate studies suggest that most athletic trainers believed it was their role to identify female collegiate athletes at risk for an eating disorder. Current results also placed a strong personal responsibility on the professional to identify these disorders. However, in contrast to the collegiate studies, where an overwhelming majority of athletic trainers' had dealt with an athlete with an eating disorder, current results showed that the majority of professionals in this study had not talked with an athlete previously about a disorder nor had they had an athlete openly come to them with an issue. Thus, these issues are not highly discussed or easily approached in high school athletics. This data provide evidence that when targeting prevention efforts toward coaches and athletic trainers it is important to stress statistics on the benefits of talking with these athletes. Furthermore, current results revealed that professionals didn't feel they could effectively offer support to an athlete with an eating disorder, whereas the collegiate studies of athletic trainer's had over half of the respondents reporting that they could offer this support. Interestingly in contrast, where in collegiate studies less than 30% of athletic trainers believed they could identify an athlete with an eating disorder, and only 38% believed he or she could ask an athlete if she had an eating disorder, the current study yielded much greater percentages of confidence, 54.6% and 40.9% respectively.

Lastly, current findings indicated, as did previous collegiate studies, that most respondents believed that one of the most important things they could do is to ensure that an athlete with an eating disorder receives the needed help that if an athlete with an eating disorder receives the needed help, it will decrease the chances that she will continue having the eating disorder.

Qualitative data established the reality of these issues for professionals working with female athletes. Though no one sport was blamed for these disorders, cheerleading seemed to be the most commented on activity where eating disorders were an issue. Therefore information specifically targeting training for cheerleading athletes and coaches is important. Respondents also commented about the need

for parents to assume responsibility for talking to an athlete about a disorder. This coincides with focus group data from former athletes suggesting that these issues are part of a larger problem, parents included. Specifically at the high school level parents still have the opportunity to see their child each day unlike parents of an athlete in college athletes. If a parent holds a negative belief of his/her own body or places an emphasis on body shape this can influence children negatively. In turn parents may feel like the child spends more time at school than at home and schools be held more accountable. In total, the role of the parent is a complex issue. Therefore, when considering prevention and training materials, these data reaffirm the importance of targeting prevention and training efforts to more than just the professionals who work with female athletes. Parents and individuals to whom the professionals may refer athletes also need to be able to support them.

Finally professionals provided recommendations for future trainings, education, and information to assist coaches and athletic trainers in areas of body image and eating disorders with female athletes. Recommendations included online sources, coaching clinics, videos, and informative speakers. Specifically identification of the disorders and how to manage such issues were documented as tools needed to assist professionals in these efforts. This provides insight into the delivery methods in which future information should be provided to professionals and also gives direction as to where to insert training with this content.

<div align="center">

Research Question Three

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The third component of the study had former high school female athletes share their experiences relating to body image issues and eating disorders during high school athletics with specifics being given to the their interaction with coaches and athletic training professionals. According to Thompson and Sherman (1999), athletes are a subgroup of women who have increased risk because they not only experience general societal pressures regarding thinness, but sport-specific pressures as well. As indicated by the focus group discussions, sport specific pressures are real at the high school level. Beliefs surrounding the negativity of body image and eating disorders often led to occurrences of lack of attention

to these issues and secrecy in the athletic environment. Athletes often do not want to talk about or share these issues, especially with coaches or athletic trainers, and keep them hidden and secret. For professionals who work with female athletes, this makes it even harder to pinpoint issues in girls who may not openly share this information. This backs up recommendations made by professionals suggesting a need for resources that assist in the identification of such issues. As revealed by the focus group participants, we see that each situation was unique and there was no easy or quick fix. This is also important in the training of professionals. Professionals cannot be a quick hero when dealing with these issues.

As part of these experiences, athletes specifically discussed how comparisons are constantly made in the sporting environment. These comparisons were made on many levels. Athletes compared themselves to other athletes on the team, to the ideal body type for the sport, and to the image they felt the coach desired. The locker room scene played a critical role in these comparisons because changing in front of each other allowed athletes to see differences in physical development or weight. These comparisons may be best explained by Festinger's (1954) social comparison theory. Festinger proposed this theory to explain comparative judgments concerning one's opinions and abilities. He further suggested that individuals are motivated to compare themselves to specific or general others to assess their own social situation.

To add to this, upward comparisons may be used to explain perception in self image for female athletes. Making an "upward" comparison (comparing themselves to someone in a higher status group) presumably results in increased dissatisfaction with their position (Parker, Haytko, Hermans, 2008). As the focus groups revealed, most of the comparison in high school sports tends to be "upward" rather than "downward" which results in lower levels of self-perceived attractiveness (Wheeler & Miyake, 1992). Essentially, based on the discussions surrounding comparisons, high school female athletes assess their own situation relative to expectations of the sport and other athletes on the team, often leading to unrealistic or negative views of their bodies. Professionals working with females in these areas need to

acknowledge that these comparisons are occurring and try to minimize the effects these comparisons can have, specifically not imposing idealistic images on female athletes. Training should specifically include ways coaches can alleviate these comparisons.

Uniforms, primarily those for cheerleading, volleyball, cross country, and track added to the pressures for high school female athletes. Short shorts, mid-drift tops, and tanks with nothing more than a sports bra were discussed as motives to achieve a certain image. Demands escalated when athletes knew they were going to be watched or judged during performance in these uniforms. Particularly cheerleading as a combination of the uniform, small weight for competition, and pressures from coaches emerged as a primary sport in which such issues occur. Objectified body consciousness theory (McKinley, 1999) presents a unified theoretical framework for understanding this experience. The central tenet of objectified body consciousness theory is that the feminine body is socially constructed as an object to be looked at (McKinley, 1999). Female athletes understand that their body is going to be judged and observed for both the sport and that of female stereotypes. In addition, body cathexis, the degree of satisfaction or dissatisfaction people have with their bodies and their bodies' separate parts (Secord & Jourard, 1953), can play a role in impacting how an athlete may feel about a certain uniform or display of the body for the sport. Providing theoretically-based information to professionals on how to work with athletes to balance these pressures is critical.

Athletes also discussed how pressures changed depending on the sport and the coach in which they were performing under. For example athletes described how an athlete may play under three different coaches in three different sporting seasons in one academic year. Image requirements depending on the sport and pressures from the coach may look very different from one season to the next requiring constant image transitions in one academic year. Athletes also described how image stereotypes outside the sport, primarily petite femininity, may be very different than what the sport requires--strong and muscular. This compares to Krane, Choi, Baird, Aimar, and Kauer's 2004 study discussing how the sportsman lives in two cultures. This again can lead to constant image pressures for athletes in these

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situations. Situational body image can be used to explain these situations. As explained by James (2001), situational body image described how *body image* is not fixed but is related to the situation at a particular time. Body image depends on the audience to the activity at the time and whether the physical characteristics and rules of the place itself affect an individual's exposure to that audience. For female athletes the image that is required for sport may not be the same image they wish to achieve outside of the athletic realm. Furthermore the ideal image for one sport may conflict with the desired body type for the next athletic season creating constant transitions. These concepts are important for not only coaching and athletic training professionals but for parents and other school administrators and professionals who may see athletes trying to maintain these shifts in image.

Finally, athletes provided recommendations to professionals who work with female athletes in the high school area. The data aligned with suggestions from the Coaches Association of British Columbia titled "*Coaching Female Athletes*" discussed in Chapter 2. They suggested coaches be open and supportive and that coaches need to acknowledge it can happen to their team and be educated about the issues, not being afraid to approach and talk to female athletes. Participants also shared their recommendations for working with female athletes. Not only do professionals need training and resources on eating disorders but a holistic approach should be considered that includes discussions on weight management, nutrition, and physical development. They also suggested sharing this information with the athletes, bringing it full circle. Administration can also be a part of the solution, requiring professionals to receive such training and being better gatekeepers of who work with these athletes in general.

Conclusion

Based upon the results of the study it can be concluded that coaching and athletic training degrees in the state of Georgia fall under the sanction of higher accreditation standards that include nutrition and weight management teaching requirements. Though eating disorder and body image material is disseminated via lecture or discussion for programs in Georgia, not all coaches working with female

athletes at the high school level hold a degree in a related field or are current graduates in which such information is included in the curriculum. Therefore enhancing current curricula in which this information is shared may be beneficial but will not be effective in reaching the greatest percentage of professionals who work with female high school athletes.

Negative experiences surrounding body image and eating disorders are indeed occurring in the high school setting and coaches and athletic trainers need to have the knowledge and resources to be part of the solution. Professionals working with female athletes feel these issues are a concern but do not feel that they can adequately support athletes in these issues. Athletes feel that coaches and athletic trainers need to be more educated and supportive for individuals with these disorders. Though coaches and athletic trainers have the ability to recognize these issues in the sporting arena, assistance for these disorders go beyond the realm of the athletic environment to include the need for a combined team approach of coaches, athletic trainers, parents, counselors, administration, etc. Therefore all of these individuals must be considered when developing resources and trainings regarding these issues in high school female athletics. Online resources and trainings may be best received by professionals working in these settings creating accessibility to reach a greater number of individuals.

Personal Implications

For me, this study has helped me to realize that it is not new curricula that I need to create. I found through my research that there are a vast number of useful tools and resources available on body image and eating disorder issues in female athletes. I also found resources specifically targeted for coaching and athletic training professionals, most notably the National Eating Disorder Association's Toolkit for Coaches and Trainers. What is unique is that high school level professionals are either not accessing these materials or are not comfortable discussing the topics with their athletes. Therefore what good are these sources of they are not being used or the professionals do not feel comfortable in using them?

I also was intrigued by the prevalence of these issues in high school female athletes. Most of the literature discusses collegiate athletes. Though we read and study the statistics, it doesn't seem tangible until we hear the stories from former athletes who experienced this in high school athletics. Also the study opened my eyes to how coaches and athletic trainers feel about these issues. Perhaps it was the personal emails through the survey where coaches and athletic trainers shared this concern and asked for a personal visit to their schools to address body image issues with their athletes that made the greatest impact and provided insight into my next steps to try to make a difference in this area.

In conclusion, I feel that overall the study allowed me to see the forest and not the just the trees, to find a way to use the resources we have to touch the greatest number of professionals and additional contacts such as parents and administrators and to try and impact female athletes with regard to body image and eating disorder issues.

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Appendix A: Education Programs and Degrees in Georgia

Accredited Athletic Training Education Programs in Georgia

Degree	Major	College/University
Bachelor of Science	Athletic Training	Georgia College & State University
Bachelor of Science	Athletic Training	North Georgia College and State University
Bachelor of Science in Athletic Training	Stand-alone Degree	Valdosta State University
Bachelor of Science in Kinesiology	Athletic Training	Georgia Southern University
Bachelor of Science	Athletic Training	University of Georgia

Accredited Coaching Education Programs in Georgia

Degree	Major	College/University
Certificates of Less than One Year	Coaching	Georgia Southern University

Coaching Degrees within the State of Georgia

Degree	Major	College/University
Bachelor of Science	Physical Education Teaching and Coaching	Georgia College & State University^
Bachelor of Science	Physical Education Teaching and Coaching	North Georgia College and State University^
Bachelor of Arts in Interdisciplinary Studies	Specialization Choice of Coaching	Covenant College*
Minor in Physical Education	Specialization Coaching	Toccoa Falls College*
Minor	Coaching	LaGrange College*

^ denotes public institutions
*denotes private institutions

Appendix B: Email to Program Faculty

Dear _____:

As a PhD candidate at the University of Georgia I am attempting to assess the inclusion of body image and eating disorder issues within the (athletic training/coaching) curriculum at your institution.

Your candid and thoughtful reply will help my assessment. I would appreciate any specifics you can provide on the courses in which these issues are presented as well as details into how the content is presented (i.e. management of these disorders, definitions, etc.). Your response and any comments will be treated with utmost confidentiality. After the results are tabulated and compiled, I will issue a report.

Thank you again for your help.

Sincerely,

Mandy Jarriel

Appendix C: Curriculum Scan Results

Institution	Degree Offered	Course identified in which body image content is present.	How body image and eating disorders are addressed in this class.	Documentation of Results	Specific Comments from Program Faculty at this Institution
Georgia College & State University	Athletic Training	Clinical Athletic Training I Nutrition General Medical Conditions and Pharmacology	Student must be able to complete this as a proficiency: Psychosocial Intervention and Referral. In Chapters 2 and 10-12 covered in the course. Through the chapter on Special Populations to cover the objective: Understanding of the potential need for psychosocial intervention and referral when dealing with populations requiring special consideration Primarily lecture based and discussion	Clinical Athletic Training I Course Syllabus Nutrition Syllabus Personal communication with program faculty	Feel that this is an important clinical issue that should be addressed in our courses, Clinical Coordinator devotes majority of research to this area.
North Georgia College and State University	Athletic Training	General Medicine in Athletic Training	Emphasis on psychosocial intervention and referral of athletes.	Course catalog description	
Valdosta State University	Stand-alone Degree in Athletic Training	Health and Wellness for Life Sport	Investigates the major health problems in modern society. Investigates signs and	Course catalog description Course catalog description	

		Related Illnesses and Conditions	symptoms common to athletes.	Course catalog description	
			Study of knowledge and skills certified athletic trainers must possess to recognize the behaviors for intervention and referral.		
		Athletic Training Ethics and Psychosocial Issues			
Georgia Southern University	Athletic Training	Healthful Living	Covers the material through reading of chapter, movie, and class discussion.	Personal communication with program faculty	In the Healthful living course the material is not very in depth. Covers it in a single unit
		Prevention of injury and illness			
		Nutrition	Lectures Discussion Clinical Proficiency on Psychosocial Intervention and Referral		
		Senior Seminar in Athletic Training			
University of Georgia	Athletic Training	General Medical Conditions and Disabilities	First covered here (lecture format)	Personal communication with program faculty	
		Practicum in Athletic Training	Reviewed again here (lecture format with worksheet and clinical proficiency to be completed)		
		Nutrition	Covered in this course as well (lecture format)		
North Georgia College and State University^	Physical Education Teaching and Coaching	Personal Health and Fitness	Chapter devoted to this topic lecture, discussions	Personal communication with program faculty	
Covenant College*	Specialization Choice of Coaching	Sociology and Psychology of Sport	Psychological and sociological concepts applied to human performance in exercise and sport.	Course catalog description	
Toccoa	Minor in	First Aid,	Introduce students to	Course catalog	

Falls College*	Coaching	CPR, and Life Fitness	nutritional techniques	description	
LaGrange College*	Coaching	Principles of Strength Conditioning and Nutrition for Athletes	Nutritional principles as these relate to athletic performance are included.	Course catalog description.	

Blue shading: Athletic Training Institutions
^ denotes public institutions
*denotes private institutions

Appendix D: Email requesting survey participation

Initial Email Invitation

Dear _____,

I am a PhD candidate at the University of Georgia. As part of my research, I am attempting to identify the learning needs of high school athletic trainers and coaches in the area of body image and eating disorders. I am contacting you because you work with female high school athletes and I hope you will participate in the state-wide survey linked below. Your input will aid the development of effective curriculum materials for athletic training and coaching programs. Your responses are confidential; when the survey closes, no information will be retained that associates your name or email address with your answers on the questionnaire.

This email is being sent to all athletic trainers and coaches who work with female high school athletes in Georgia. We did our best to identify appropriate personnel at each high school. If you received this email by mistake, feel free to forward it to the coaches or athletic trainers who work with female high school athletes at your school.

The questionnaire will take about 10 minutes to complete. Please access the survey by clicking on the following link or cut and paste the entire URL into your browser to access the survey.

Link:_____

Your responses will be most helpful if received by (deadline).

To show appreciation for your assistance, we invite you to enter a drawing for a $50 Amazon gift card. One grand prize winner will be drawn randomly from the list of everyone who enters that drawing. To participate, please enter your email address as indicated at the bottom of the questionnaire; without that information we would not be able to contact the winner. After the winner has been selected, all email addresses will be erased from the data. If you prefer, you can complete the questionnaire without entering the drawing or you can enter the drawing without completing the questionnaire. Participation in the research is not required for a chance to win the gift certificate.

If you have any questions or would prefer to complete a paper questionnaire please call me at 770-307-8467 or email me at mandy.jarriel@gcsu.edu .

Sincerely,
Mandy Jarriel

Please note:

This research is being conducted by Mandy Jarriel under the direction of Dr. Diane M. Samdahl, Department of Counseling and Human Development Services, University of Georgia (706-542-4333). The title of this project is "Perspectives of professionals working with high-school aged female athletes regarding the identification and management of issues surrounding eating disorders."

You must be 18 years of age or older to participate. Your participation is strictly voluntary. By submitting your questionnaire you are consenting to participate. You can refuse to participate without giving any reason, and you do not have to provide information that you do not wish to disseminate. You can enter the drawing for the Amazon gift card without providing other information on the questionnaire.

No risks are expected, however you may find that your participation provides personal satisfaction because you will be playing an active role that impacts future curriculum in this area. You may also find the experience to be validating as you share your experiences with female high school athletes who have body image or eating disorders.

The survey is going out to all athletic trainers and coaches who work with female high school athletes in Georgia. No individually-identifiable information about you, or provided by you during the research, will be shared. After the drawing for the Amazon gift card, email addresses will be stripped from the data and the original mailing list will be destroyed, ensuring the confidentiality of all data. Key information will be protected as necessary through the use of pseudonyms or other minor alterations in subsequent reports and analyses.

Please save/print a copy of this email for your records.

Additional questions or problems regarding your rights as a research participant should be addressed to

The Chairperson, Institutional Review Board, University of Georgia, 612 Boyd Graduate Studies

Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address

IRB@uga.edu

About two [four] weeks ago I sent you an email inviting you to participate survey about the learning needs of high school athletic trainers and coaches in areas of body image and eating disorders. If you have already responded, thank you for your help.

If you have not yet had time to respond, please take a few minutes to complete the survey now. It should take you less than 10 minutes. Your participation is completely voluntary but your input will strengthen our efforts to design effective curriculum materials for athletic training and coaching professionals who work with high school girls.

Link: _____

Please respond by [date].

As my way of thanking you, you are also invited to enter a drawing for a $50 Amazon gift card. You can complete the survey without entering the drawing, or you can enter the drawing without completing the rest of the questionnaire. If you wish to be included in that drawing, please enter your email address where indicated at the end of the questionnaire. This information is necessary in order to contact the winner, but all email addresses will be dropped from the data once the winner has been selected.

Please call me at 770-307-8467 or email me at mandy.jarriel@gcsu.edu if you have any questions.

Please note:

This research is being conducted by Mandy Jarriel at the University of Georgia, under the direction of Dr. Diane M. Samdahl, Department of Counseling and Human Development Services, University of Georgia (706-542-4333). The title of this project is "Perspectives of professionals working with high-school aged female athletes regarding the identification and management of issues surrounding eating disorders."

You must be 18 years of age or older to participate. Your participation is strictly voluntary. By submitting your questionnaire you are consenting to participate. You can refuse to participate without giving any reason, and you do not have to provide information that you do not wish to disseminate. You can enter the drawing for the Amazon gift card without providing other information on the questionnaire.

No risks are expected, however you may find that your participation provides personal satisfaction because you will by playing an active role that impacts future curriculum in this area. You may also find the experience to be validating as you share your experiences with female high school athletes who have body image or eating disorders.

The survey is going out to all athletic trainers and coaches who work with female high school athletes in Georgia. No individually-identifiable information about you, or provided by you during the research, will be shared. After the drawing for the Amazon gift card, email addresses will be stripped from the data and the original mailing list will be destroyed, ensuring the confidentiality of all data. Key information will be protected as necessary through the use of pseudonyms or other minor alterations in subsequent reports and analyses.

Please save/print a copy of this email for your records.

Additional questions or problems regarding your rights as a research participant should be addressed to The Chairperson, Institutional Review Board, University of Georgia, 612 Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address IRB@uga.edu

Appendix E: Professionals Survey

The following questions deal with demographics; please answer the questions as they apply to you.

1. Is your current position…
    a. coach
    b. athletic trainer
    c. coach and athletic trainer
    d. neither

2. How many years of coaching/athletic training experience do you have?
    _____

3. How many years have you been a coach or athletic trainer at this current school? _____

4. Please check the female athletic team you are currently coaching or working with as an athletic trainer at the high school level. (Check all that apply)
____Basketball
____Cross country
____Golf
____Lacrosse
____Softball
____Soccer
____Swimming/Diving
____Tennis
____Track
____Volleyball
____Cheerleading
____Gymnastics
____Ultimate Frisbee
____Equestrian
____Other (_____)

5. What is your highest level of education?
    a. high school
    b. associates degree
    c. bachelors degree
    d. masters degree
    e. doctoral degree

Please read the following questions and choose the most appropriate answer. Please note there is no right or wrong answer and I invite your open and honest input.

6. Disordered eating can have negative **performance** consequences for a female athlete. Using the scale in the table below, please rate your assessment of the seriousness of the behaviors (for performance) below by placing an "x" under the appropriate response.

	Not at all serious	Somewhat serious	Serious	Very Serious
Binge eating (eating large volumes of food)				
Skipping one meal a day				
Skipping two meals a day				
Fasting for an entire day				
Self-induced vomiting				
Laxative abuse (using more than directed)				
Diuretic/water pill abuse (using more than directed)				
Weighing oneself multiple times a day				
Excessive exercise (more than required by sport)				
Undereating (burning more calories than ingesting				
Eating fast food occasionally (a few times per week)				
Eating fast food frequently (daily)				

7. Has there been a time where you talked with a female athlete about an eating disorder?
   a. yes
   b. no

If yes explain.

8. Has there been a time where you referred an athlete for an eating disorder?
   a. yes
   b. no

If yes, explain.

9. Has there been a time where a student athlete came to you about an eating disorder issue?
   a. yes
   b. no

If yes, how did you handle it? Explain.

10. Has there been a time where you suspected that a student athlete had an eating disorder, but they did not come to you personally about it?
   a. yes
   b. no

 If yes, how did you handle it? Explain

11. How many of your student athletes have you known to have had an eating disorder while you were working with them? _____

12. Do you know of an athlete that you once worked with that had an eating disorder you were unaware of while you were working with them?
   a. yes
   b. no

Explain.

This next section of the survey will assess your comfort level while working with female athletes with body image and eating disorder. Again, there is no right or wrong answer, simply use the scale to assess where you identify most strongly.

13. I can ask an athlete if she has an eating disorder.
   a. Disagree Strongly
   b. Disagree Somewhat
   c. Neutral
   d. Agree Somewhat
   e. Agree Strongly

14. If I ask an athlete if she has an eating disorder, it will increase the chances that she will receive the needed help.
   a. Disagree Strongly
   b. Disagree Somewhat
   c. Neutral
   d. Agree Somewhat
   e. Agree Strongly

15. I can identify an athlete with an eating disorder.
   a. Disagree Strongly
   b. Disagree Somewhat
   c. Neutral
   d. Agree Somewhat
   e. Agree Strongly

16. If I identify an athlete with an eating disorder, it will increase the chances that she will receive the needed help.
   a. Disagree Strongly
   b. Disagree Somewhat
   c. Neutral
   d. Agree Somewhat
   e. Agree Strongly

17. I feel it is my role as a professional to identify an athlete with an eating disorder.
    a. Disagree Strongly
    b. Disagree Somewhat
    c. Neutral
    d. Agree Somewhat
    e. Agree Strongly

18. As a professional working with female athletes, one of the most important things I can do is to identify an athlete with an eating disorder.
    a. Disagree Strongly
    b. Disagree Somewhat
    c. Neutral
    d. Agree Somewhat
    e. Agree Strongly

19. I can effectively offer support to an athlete with an eating disorder.
    a. Disagree Strongly
    b. Disagree Somewhat
    c. Neutral
    d. Agree Somewhat
    e. Agree Strongly

20. If I effectively offer support to an athlete with an eating disorder, it will increase the chances that she will receive the needed help.
    a. Disagree Strongly
    b. Disagree Somewhat
    c. Neutral
    d. Agree Somewhat
    e. Agree Strongly

21. If I refer an athlete with an eating disorder to a psychologist or nutritionist, it will increase the chances that she will receive the needed help.
    a. Disagree Strongly
    b. Disagree Somewhat
    c. Neutral
    d. Agree Somewhat
    e. Agree Strongly

22. If an athlete with an eating disorder receives the needed help, it will decrease the chances that she will continue having the eating disorder.
    a. Disagree Strongly
    b. Disagree Somewhat
    c. Neutral
    d. Agree Somewhat
    e. Agree Strongly

Finally, this last section deals with common body image and eating disorder myths. Please identify which of these you feel to be true or false.

23. Eating disorders are not an illness.
    a. True
    b. False

24. Eating disorders are uncommon.
    a. True
    b. False

25. Eating disorders are a choice.
    a. True
    b. False

26. Anorexia nervosa is the only serious eating disorder.
    a. True
    b. False

27. A person cannot die from bulimia.
    a. True
    b. False

28. An individual is not sick until they are emaciated.
    a. True
    b. False

29. You can tell if a person has an eating disorder simply by appearance.
    a. True
    b. False

30. Recovery from eating disorders is rare.
    a. True
    b. False

Thank you for completing this survey.

Appendix F: Informed Consent for Interview

Informed Consent Form

I, _____, agree to participate in the research study titled "Women's reflections on eating disorders during high school athletics" conducted by Mandy Jarriel from the Department of Counseling and Human Development Services (770-307-8467) under the direction of Dr. Diane M. Samdahl, Department of Counseling and Human Development Services, University of Georgia (706-542-4333). I understand that my participation is voluntary. I can refuse to participate or stop taking part at anytime without giving any reason, and without penalty or loss of benefits to which I am otherwise entitled. I can ask to have all of the information about me returned to me, removed from the research records, or destroyed.

The purpose of this study is to gather information and advice from female high school graduates WHO ARE 18 YEARS OF AGE OR OLDER about their experiences with body image and eating disorders during high school athletics. The broader goal of this research is to contribute to the development of effective curriculum materials for programs that prepare high school athletic trainers and coaches. If I volunteer to take part in this study, I will be asked to do the following things:

1) Participate in ONE 1-1 1/2 hour focus group with collegiate women who played varsity athletics during high school that will be audio recorded
2) Answer questions about my high school athletic experience related to coaches and athletic trainers' within the realm of body image and eating disorders
3) Enjoy refreshments provided at your leisure
4) Provide my email address in the case that I am interested in the findings in order for the researcher to provide these to me
5) My personal name will not be used and I will be referred to by a pseudonym.
6) My information will be destroyed once I have had the opportunity to provide feedback on the initial analysis

I understand that I do not have to provide information that I do not wish to disseminate or feel uncomfortable speaking about.

The benefit to me is the personal role that I may feel in being a solution to a problem. I may also find the experience to be validating and liberating to share by past experiences with others. Lastly, I may also find comfort in sharing my thoughts and experiences with others who have had similar high school happenings. The researcher also hopes to contribute to the curriculum development for professionals working with female athletics in the high school setting.

No risk is expected but I may experience some discomfort if I revisit an uncomfortable time that occurred during my high school athletic experience, however by talking with others who have went through these same experiences and by utilizing the resource packet in which the researcher distributes these risks can be minimized.

Individual identifiers will not be used and I will be referred to by a pseudonym. Pseudonyms will be used and identifiable facts will be modified to assure confidentiality of all information that is revealed during the focus groups. The individually-identifiable information about me, or provided by me during the research, will not be shared with others without my written permission. My identifiable information will be stripped and destroyed once I have had the opportunity to provide feedback on the initial analysis. I will also be reminded of the need to respect and hold private anything that was disclosed during the discussion.

The investigator will answer any further questions about the research, now or during the course of the project.

I understand that I am agreeing by my signature on this form to take part in this research project and understand that I will receive a signed copy of this consent form for my records.

_____   _____

Name of Researcher   **Signature**   **Date**

_____   _____

Telephone   **Email**

_____   _____

Name of Participant   **Signature**   **Date**

Please sign both copies, keep one and return one to the researcher.

Additional questions or problems regarding your rights as a research participant should be addressed to The Chairperson, Institutional Review Board, University of Georgia, 612 Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address IRB@uga.edu

Informed Consent Form

I, _____, agree to participate in the research study titled "**Women's reflections on eating disorders during high school athletics**" conducted by Mandy Jarriel from the Department of Counseling and Human Development Services (770-307-8467) under the direction of Dr. Diane M. Samdahl, Department of Counseling and Human Development Services, University of Georgia (706-542-4333). I understand that my participation is voluntary. I can refuse to participate or stop taking part at anytime without giving any reason, and without penalty or loss of benefits to which I am otherwise entitled. I can ask to have all of the information about me returned to me, removed from the research records, or destroyed.

The purpose of this study is to gather information and advice from female high school graduates about their experiences with body image and eating disorders during high school athletics. The broader goal of this research is to contribute to the development of effective curriculum materials for programs that prepare high school athletic trainers and coaches. If I volunteer to take part in this study, I will be asked to do the following things:

7) Phone or email the researcher and leave a message expressing interest in participation; you will be asked to leave a phone number.
8) Participate in 1-1 1/2 hour focus groups with collegiate women who played varsity athletics during high school
9) Answer questions about my high school athletic experience related to coaches and athletic trainers' within the realm of body image and eating disorders
10) Provide my email address in the case that I am interested in the findings in order for the researcher to provide these to me
11) My personal name will not be used and I will be referred to by a pseudonym.
12) My information will be destroyed once I have had the opportunity to provide feedback on the initial analysis

I understand that I do not have to provide information that I do not wish to disseminate or feel uncomfortable speaking about.

The benefit to me is the personal role that I may feel in being a solution to a problem. I may also find the experience to be validating and liberating to share by past experiences with others. Lastly,

I may also find comfort in sharing my thoughts and experiences with others who have had similar high school happenings. The researcher also hopes to contribute to the curriculum development for professionals working with female athletics in the high school setting.

No risk is expected but I may experience some discomfort if I revisit an uncomfortable time that occurred during my high school athletic experience, however my talking with others who have went through these same experiences and by utilizing the resource packet in which the researcher distributes these risks can be minimized.

Individual identifiers will not be used and I will be referred to by a pseudonym. The individually-identifiable information about me, or provided by me during the research, will not be shared with others without my written permission. My identifiable information will be destroyed once I have had the opportunity to provide feedback on the initial analysis.

The investigator will answer any further questions about the research, now or during the course of the project.

I understand that I am agreeing by my signature on this form to take part in this research project and understand that I will receive a signed copy of this consent form for my records.

_____   _____
Name of Researcher   **Signature**   **Date**

_____   _____
Telephone   **Email**

_____   _____
Name of Participant   **Signature**   **Date**

Please sign both copies, keep one and return one to the researcher.

Research at Georgia College & State University involving human participants is carried out under the oversight of the Institutional Review Board. Questions or problems regarding these activities should be addressed to Mr. Quintus Sibley, Director of Legal Affairs, CBX 041, GCSU, (478) 445-2037

Appendix G: Interview Guide

- What do you think of when you hear about body image or eating disorders? [Probes: What does that mean to you? Do you know anyone who experienced that?]
- Do you feel there is a connection between body image and eating disorders and sports? [Probes: Why? Give me some examples to illustrate that point.]
- Were body image or eating disorders a problem for anyone on your high school teams? [Probes: tell me more about that; what did that girl do? Was that related to being on the team? Try to get rich stories.]
- Do you think the athletic trainer or coach knew that some girls had body image or eating disorders on your team? [Probes: what did the trainer/coach do? How did that make the girl feel? What happened in that situation? Were there times when a coach made that problem worse? What about helping—how did trainers/coaches help girls who had body image or eating disorders? What happened to that girl?]
- Do you think trainers/coaches who work with high school girls know enough about body image or eating disorders? [Probes: Why? Give me an example to illustrate that point.]
- What advice would you give to high school coaches and athletic trainers who work with the girls' teams? [Probes: what should they do when they see this in a girl? How would you like them to respond? What could they do differently?]
- Is there anything we should have talked about, but didn't?

Appendix H: Coaching Standards and Domains

National Standards for Sport Coaches

Domain 1: Philosophy and Ethics *(Standards 1-4)*

- Articulate the importance of an athlete-centered coaching philosophy and professional accountability.

Domain 2: Safety and Injury Prevention *(Standards 5-11)*

- Establish expectations for coaches to create and maintain a healthy sport experience.

Domain 3: Physical Conditioning *(Standards 12-15)*

- Highlight the importance of using scientific principles in designing and implementing conditioning for national performance gains. Specific attention is given to body composition and weight management issues. The role physical conditioning plays related to injuries is also included.

Domain 4: Growth and Development *(Standards 16-18)*

- Identify developmental considerations in designing practice and competition to enhance the physical, emotional, and social growth of athletes.

Domain 5: Teaching and Communication *(Standards 19-26)*

- Responsibility to create a positive coaching style while maximizing learning enjoyment.

Domain 6: Sport Skills and Tactics *(Standards 27-29)*

- Use basic sport skills and accept prescribed rules in developing team and individual competitive tactics.

Domain 7: Organization and Administration *(Standards 30-36)*

- Risk management responsibily as well as the effective use of human and financial resources.

<u>Domain 8: Evaluation</u> *(Standards 37-40)*

- Identify the ongoing and meaningful evaluation responsibilities of the coach.

Appendix I: Athletic Training Content Areas

0. *Foundational Behaviors of Professional Practice*: The application of the common values of the athletic training profession.

1. *Risk Management and Injury Prevention*: The entry-level certified athletic trainer must possess an understanding of risk management and injury prevention and demonstrate the necessary skills to plan and implement prevention strategies.

2. *Pathology of Injuries and Illnesses*: The entry-level certified athletic trainer must possess an understanding of the cellular events and reactions, and other pathological mechanisms in the development, progression and epidemiology of injuries, illnesses and diseases.

3. *Orthopedic Clinical Examination and Diagnosis*: The entry-level certified athletic trainer must possess the ability to clinically examine and diagnose a patient for the purpose of identifying (a) common acquired or congenital risk factors that would predispose the patient to injury and (b) musculoskeletal orthopedic injuries to determine proper care including the referral of the patient to other health care providers when appropriate.

4. *Medical Conditions and Disabilities*:   The entry-level certified athletic trainer must possess an understanding of medical conditions and disabilities associated with physically active individuals.

5. *Acute Care of Injuries and Illnesses*: The entry-level certified athletic trainer must recognize, assess, and treat patients with acute injuries and illnesses, and provide appropriate medical referral.

6. *Therapeutic Modalities*: The entry-level certified athletic trainer must plan, implement, document, and evaluate the efficacy of therapeutic modalities in the treatment of injuries to and illnesses of their patients.

7. *Conditioning and Rehabilitative Exercise*: The entry-level certified athletic trainer must plan, implement, document, and evaluate the efficacy of therapeutic exercise programs for the rehabilitation and reconditioning of injuries and illnesses.

8. *Pharmacology*: The entry-level certified athletic trainer must possess an understanding of pharmacologic applications and governing pharmacy regulations relevant to the treatment of injuries, illnesses, and diseases.

9. *Psychosocial Intervention and Referral*: The entry-level athletic trainer must possess the ability to recognize, intervene, and refer when appropriate, patients exhibiting sociocultural, mental, emotional, and psychological behavioral problems/issues.

10. *Nutritional Aspects of Injuries and Illnesses*: The entry-level certified athletic trainer must possess an understanding of the nutritional aspects of injuries and illnesses.

11. *Health Care Administration*: The entry-level certified athletic trainer must possess the knowledge and skills to develop, administer, and manage a health care facility and associated venues that provide health care to athletes and others involved in physical activity.

12. *Professional Development and Responsibility*: The entry-level certified athletic trainer must possess the knowledge and skills to understand professional responsibilities and avenues of professional development to promote athletic training as a professional discipline.

Appendix J: Athletic Training Content Areas with Specific Competencies

Psychosocial Intervention and Referral

- *Cognitive Competency (number 10 of 15)*: "Identify the symptoms and clinical signs of common eating disorders and the psychological and sociocultural factors associated with these disorders."

- *Clinical Proficiency (number 1 of 2)*: "Demonstrate the ability to conduct an intervention and make the appropriate referral of an individual with a suspected substance abuse or other mental health problem. Effective lines of communication should be established to elicit and convey information about the patient's status. While maintaining patient confidentiality, all aspects of the intervention and referral should be documented using standardized record-keeping methods."

Nutritional Aspects of Injuries and Illnesses

- *Cognitive Competency (numbers 12 and 14 of 20)*: "Explain principles of weight control for safe weight loss and weight gain, and explain common misconceptions regarding the use of food, fluids, and nutritional supplements in weight control" and "Describe disordered eating and eating disorders (i.e., signs, symptoms, physical and psychological consequences, referral systems)."

- *Clinical Proficiency (number 2 of 2):* "Demonstrate the ability to recognize disordered eating and eating disorders, establish a professional helping relationship with the patient, interact through support and education, and encourage vocal discussion and other support through referral to the appropriate medical professionals.

Appendix K: Example of Qualitative Analysis

8. What do you think of when you hear about body image or eating disorders? [Probes: What does that mean to you? Do you know anyone who experienced that?]

<u>UGA Focus Group</u>
C: I think it's a universal feeling, you just want to feel good and look good, but when you were talking, line 12
G3: I think it has a negative connotation, I mean eating disorders are never regarded as like a positive thing and so like I mean I don't think it should be regarded as a positive thing but um and like body image, when people talk about body image they're not talking about like self esteem, it's body image, like how you look physically and how you should meet like quote unquote standards, so I feel like self esteem is the more positive way or a more positive connotation of like body image and I picture body image as the negative way if that makes sense
S: I feel like eating disorders can have a positive connotation at least among, like I was proud of my eating disorder in a way, like one of my best friends had the same eating disorder I had and we would like you know practice our symptoms together and I don't know, I thought it was positive, I wasn't embarrassed doing it or about the eating disorder and be like oh poor me, like to the world it seems negative but in our twisted minds.. you know that's the reason I had an eating disorder because I wanted to, lines 71-82

<u>GCSU Focus Group 2</u>
N: Strict, like the very most end of the spectrum
H: Skinny
G: Like someone who is concerned with everything they put in their mouth
C: Yeah, that's what I think about someone who watches everything they eat, watches their exercise,
H: Someone who thinks about it everyday, you are constantly worried about it, you probably don't notice how many people have a problem with it, just not at the extreme
K: When I start thinking about body image I think of literally start picturing like People magazine, like fashion magazines and remembering for so long that I want to look like that and me and my friends would judge people and be like oh she's skinny or she's big, or whatever..blah, blah, blah
G: It's shoved in your face
M: Do you think that either one of those has a more positive or negative connotation?
K: I think it's both but I think when you think of eating disorders you automatically think of that girl who weighs like 90 pounds
G: I don't know I think eating disorders are much worse, like for me body image you automatically think about self conscious
H: Eating disorders, I don't know but like body image you automatically think of comparing yourself, comparing to others-
C: I think the negative aspect is what would automatically come to my mind when I think about body image, not that it's not positive, but that positive would not be the automatic first response, lines 4-22

<u>GCSU Focus Group 1</u>
16 *H* Um.. I think of… I guess right now, I feel like I think a lot about the media because everyone
17   just talks about that when they say it like because oh that's where we get our you know
18   perception of what we are supposed to look like, like in magazines. I don't really know if

19		that's TRUE but that's what a lot of people say. I think of like um. I think it has a really
20		negative connotation, like I feel like when we hear body image it's not usually a good thing
21	**M**	Ok
22	**B**	Um, I don't really know. Like I agree with the whole media concept as well and to me it's
23		not as negative though, like I kinda think of it as like, as maintaining a healthy weight, I've
24		never really had a problem with it so
25	**M**	Ok, so for you it's maintaining healthy, ok..
26	**J**	Oh um, I guess for like body image and stuff, a lot of times you always think of like the
27		videos and they always perceive beauty as being skinny, you never really see people who are
28		more insecure, are more overweight, especially like in high school, like they are not really as
29		popular and people aren't going to like them as much and others look down upon them
30		
31	**M**	Ok
32	**K**	Um.. It's really early. I really think of like peer pressure… A LOT. Like a lot of people like
33		look at you, like make your first judgement on how you look, like a lot of people in high
34		school, like she said and all that stuff, sorry it's all I can think of right now, it's really early
35	**M**	No that's fine
36	**H**	Yeah, like I agree with you. Like, It's almost like if you said it different, not body image, like
37		healthy weight, or if someone was like oh- what's your body image? I would be like Oh, I
38		guess its good, but if someone asked do you have a healthy weight, I would be like oh yeah, I
39		have a healthy weight, I'm comfortable with my weight. But for some reason *body image*, it's
40		like a, it's like a bad word, like oh gosh, I don't know it's kind of weird, but I think it's
41		maybe due to pressures like, it's just weird

- Negative
- Body image is not self-esteem, self-esteem is healthy
- Body image= how you look physically
- Body image= how you should meet standards
- ** Eating disorders can be positive if you are into it (proud of it)
- Negative not a good thing
- Media standards, videos, magazines
- Body image= not negative but maintaining healthy weight
- Beauty equals skinny
- Peer pressure, people make first judgement of how you look
- Healthy weight = positive, body image=negative, like a bad word
- Skinny
- End of the spectrum
- Thinks about it everyday, constantly worried about it
- Judging
- Body image self-conscious, eating disorders worse
- Positive not automatic first response

THEMES:

- (1)Body image is negative
-Physical looks to meet media standards (videos, magazines)
-(2) Skinny, extreme
-(3) Peer pressure and judging
-(4)Maintaining healthy weight is more positive connotation
-(5) Eating disorders are worse

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